

20030124.qrp v02\_n810.qrl.20030124

Date: Fri, 24 Jan 2003 19:03:04 EST  
From: qrp-l@Lehigh.EDU  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: QRP-L digest 2810

QRP-L Digest 2810

Topics covered in this issue include:

- 1) [145098] RE: Speaker reconing glue???  
by Nick Kennedy <nkennedy@tcainternet.com>
- 2) [145099] Re: Current Sensing  
by "Mike Yetzko" <myetzko@insydesw.com>
- 3) [145100] Re: How Would You Clean This Roller Inductor??  
by "James Reid" <jreid4@earthlink.net>
- 4) [145101] K2/100 all options - built - \$1120 delivered  
by <tlogan7@cox.net>
- 5) [145102] DC Voltage Standard?  
by Steve.Lawrence@ITWFEG.COM
- 6) [145103] Rainbow Tuner Reservations  
by David Porter <aa3ur@comcast.net>
- 7) [145104] OT: Current Sensing  
by "Mike Mullins" <mmullins@mastnet.net>
- 8) [145105] RE: VFO Buffer Amp  
by Nick Kennedy <nkennedy@tcainternet.com>
- 9) [145106] Re: Manhattan pads  
by "Jack Nelson" <jack.nelson@mindspring.com>
- 10) [145107] FOX: Way too close  
by "Karl F. Larsen" <k5di@zianet.com>
- 11) [145108] Both FOXes Spotted  
by "Doc K0EVZ" <dock0evz@earthlink.net>
- 12) [145109] FOXII - Twofer  
by "Jack Nelson" <jack.nelson@mindspring.com>
- 13) [145110] Better FOX Spots [g]  
by "Doc K0EVZ" <dock0evz@earthlink.net>
- 14) [145111] FOX: Surprise!  
by "Karl F. Larsen" <k5di@zianet.com>
- 15) [145112] Re: FOX: Bad Conditions again!  
by W2AGN <w2agn@w2agn.net>
- 16) [145113] FOX: Pow! One shot!  
by "Dave Ek" <ekdave@earthlink.net>
- 17) [145114] Re: DC Voltage Standard?  
by David Hinerman <WD8CIV@worldnet.att.net>
- 18) [145115] Two More Sweeps!  
by "George, W5YR" <w5yr@att.net>
- 19) [145116] Best Place to get 10.7Mhz and 455Khz IF Xformers

- by k4vib@att.net
- 20) [145117] Hookup wire?  
by John Farler <jfarler@peoplepc.com>
- 21) [145118] Free: ball bearings for "JJ-38" key  
by James R Giammanco <n5ib@juno.com>
- 22) [145119] Rock-Mite output amp hotter than heck  
by "Clifford, Rick" <rick.clifford@eds.com>
- 23) [145120] Re: DC Voltage Standard?  
by "George, W5YR" <w5yr@att.net>
- 24) [145121] Re: FOXII - Twofer  
by "George, W5YR" <w5yr@att.net>
- 25) [145122] Re: How Would You Clean This Roller Inductor??  
by "Prof. Arnaldo Coro Antich" <inforhc@ip.etcusa.cu>
- 26) [145123] K1/FT-817 FOXII obsevationes...  
by "Trevor Jacobs" <kg6cyn@earthlink.net>
- 27) [145124] RE: DC Voltage Standard  
by Karl Kanalz <kkanalz@gceecisp.com>
- 28) [145125] Re: Building with old parts - Question?  
by "Charles Mabbott" <aa8vs@msn.com>
- 29) [145126] Re: Two More Sweeps!  
by "Tom Palmer" <n1tp@swfla.rr.com>
- 30) [145127] SMT Cap Offer (390 pf)  
by "brian" <brian@iquiest.net>
- 31) [145128] Re: DC Voltage Standard?  
by "Mike Yetsko" <myetsko@insydesw.com>
- 32) [145129] Re: Best Place to get 10.7Mhz and 455Khz IF Xformers  
by W2EB <w2eb@twcnny.rr.com>
- 33) [145130] OT: SMT work  
by Chris Cartwright <ccart@phideaux.com>
- 34) [145131] Fox: Twofer fer me last night...  
by Thomas Jennings <jennings@eznet.net>
- 35) [145132] RS 5" Mag Mount Clearance (3/8X 24 thread)  
by Michael Babineau <michael.babineau@sympatico.ca>
- 36) [145133] Re: Rock-Mite output amp hotter than heck  
by Chuck Carpenter <w5usj@9plus.net>
- 37) [145134] What is "X"?  
by "KL7FDQ, Wayne Leman" <KL7FDQ@rangeweb.net>
- 38) [145135] L1 goes pffssst [L1 Alternative Part]  
by Chuck Carpenter <w5usj@9plus.net>
- 39) [145136] T31MY  
by "Frank King" <fking@oregonvos.net>
- 40) [145137] CQ WW 160m cw contest  
by "Bob Tellefsen" <n6wg@earthlink.net>
- 41) [145138] RE: How would you clean this tuner?  
by brewerj@squared.com
- 42) [145139] Re: How Would You Clean This Roller Inductor??  
by KD5NWA <KD5NWA@cbayona.com>
- 43) [145140] Re: PCB Printer

by "James P. Osburn, P.E." <j.p.osburn@ieee.org>  
44) [145141] Re: K1/FT-817 FOXII obsevation...  
by W2AGN <w2agn@w2agn.net>  
45) [145142] Re: How would you clean this roller inductor?  
by George Gingell <k3tks@u1.abs.net>  
46) [145143] Homebrew ladder line?  
by Alex <kr1st@amsat.org>  
47) [145144] Re: DC Voltage Standard?  
by KD5NWA <KD5NWA@cbayona.com>  
48) [145145] RE: What is "X"?  
by Nick Kennedy <nkennedy@tcainternet.com>  
49) [145146] RE: OT: Current Sensing  
by David Hinerman <WD8CIV@worldnet.att.net>  
50) [145147] Re: SMT work  
by "Chris Trask" <chistrask@earthlink.net>  
51) [145148] Re: What is "X"?  
by "Don Wines" <dwines@tyler.net>  
52) [145149] Re: How would you clean this roller inductor?  
by "Garey Barrell" <k4oah@mindspring.com>  
53) [145150] Re: What is "X"?  
by "Pat Whelton" <pwhelton@earthlink.net>  
54) [145151] What is "X and SO-LID copy  
by "AI2Q" <ai2q@adelphia.net>  
55) [145152] Re: OT: SMT work  
by Ed Tanton <n4xy@earthlink.net>  
56) [145153] Re: K1/FT-817 FOXII obsevation...  
by "KB0VCC" <kb0vcc@adelphia.net>  
57) [145154] RE: What is "X"?  
by "Charles Mabbott" <aa8vs@msn.com>  
58) [145155] Re: RS 5" Mag Mount Clearance (3/8X 24 thread)  
by "Charles Mabbott" <aa8vs@msn.com>  
59) [145156] Re: Two More Sweeps!  
by "George, W5YR" <w5yr@att.net>  
60) [145157] RE: DC Voltage Standard  
by Ed Tanton <n4xy@earthlink.net>  
61) [145158] Re: What is "X"?  
by "George, W5YR" <w5yr@att.net>  
62) [145159] Re: What is "X"?  
by Paul Valko <w8kc@comcast.net>  
63) [145160] Off Topic: FYBO and hate it? Rental near Joshua Tree Park, CA  
by <mm1esg@compuserve.de>  
64) [145161] Rock-Mite PA Heating -- SWR -- Absorptive Bridges  
by Chuck Carpenter <w5usj@9plus.net>  
65) [145162] Off Topic: FYBO and hate it? Rental near Joshua Tree, \$ 345  
by <mm1esg@compuserve.de>  
66) [145163] Re: What is "X"?  
by "KB0VCC" <kb0vcc@adelphia.net>  
67) [145164] Re: SMT work

by "Mike Yetsko" <myetsko@insydesw.com>  
68) [145165] Re: PCB Printer  
by "Mike Yetsko" <myetsko@insydesw.com>  
69) [145166] Re: RS 5" Mag Mount Clearance (3/8X 24 thread)  
by "Mike Yetsko" <myetsko@insydesw.com>  
70) [145167] QRP battery holder glue problem  
by "Tony Parks" <robert.parks11@gte.net>  
71) [145168] What is "X"?  
by "KL7FDQ, Wayne Leman" <KL7FDQ@rangeweb.net>  
72) [145169] FS 15 mtr. cub  
by "John" <jdorson@worldshare.net>  
73) [145170] Re: SMT work  
by Chris Cartwright <ccart@phideaux.com>  
74) [145171] Re: What is "X"?  
by Bruce Rattray <rattray@gpfn.sk.ca>  
75) [145172] Re: SMT work  
by "Lee Mairs" <lmairs@direcway.com>  
76) [145173] Re: OT: SMT work  
by "Lee Mairs" <lmairs@direcway.com>  
77) [145174] Re: Two More Sweeps!  
by palmer\_t <ThomasPalmer@colliergov.net>  
78) [145175] RE: How would you clean this tuner?  
by Jose Vicente <vicente@supernet.com.br>  
79) [145176] Re: What is "X"?  
by "Max Moon" <maxmoon@umn.edu>  
80) [145177] Re: What is "X"?  
by "Howard Kraus" <K2UD@adelphia.net>  
81) [145178] Re: K1/FT-817 FOXII obsevation...  
by "Karl F. Larsen" <k5di@zianet.com>  
82) [145179] RE: DC Voltage Standard  
by "E. Roswell" <eroswell@monmouth.com>

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Date: Thu, 23 Jan 2003 17:57:18 -0600  
From: Nick Kennedy <nkennedy@tcainternet.com>  
To: "'kg6cyn@earthlink.net'" <kg6cyn@earthlink.net>,  
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [145098] RE: Speaker reconing glue???  
Message-ID: <01C2C308.DFA9D840.nkennedy@tcainternet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

Parts Express has what they call "Speaker Repair Glue" at \$5.99.

<http://www.partsexpress.com/index.cfm>

72--Nick, WA5BDU

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Date: Thu, 23 Jan 2003 18:59:53 -0500  
From: "Mike Yetsko" <myetsko@insydesw.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [145099] Re: Current Sensing  
Message-ID: <006b01c2c33b\$89fad880\$0300a8c0@charter.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

> I want some things to happen when the transmitter turns on in a little  
jig  
> I'm building, but I don't want to use RF sensing.  
>  
> I'd like to use a current sensor to know when the amp is on, not just  
when  
> it's putting out RF. I was thinking of using the A/D converter in the  
> processor chip.  
>  
> Have any of you guys compared currents with A/D converters? Know of any  
good  
> tutorials? I'm new to micro controllers and A/D, have no clue what I'm  
> doing. Any pointers would be great.  
>  
> Tracy N4LGH

One of the easy tricks you can use with ANY source in an opto-isolator.

First, if it's DC, pick a diode that can easily handle the current you're  
going to draw. Put TWO of them in line, in series. That will give you  
'about' a 1.4v voltage drop. Then put the opto ACROSS it with a  
resistor in series to protect the thing, calculated for the 1.4v or so  
from the two diodes in series. Now the opto will turn on when the  
amp draws enough current to forward bias the two diodes in the main  
line.

This ASSUMES that your feed voltage is NOT critical to the amps  
performance and that the 1.4v drop is acceptable.

With AC it's also easy. Just do the 2 diode trick again, but this time  
with 4 diodes. 2 in series one way, two in series ACROSS the first

two the other way. This will give you a simple 1.4v drop in the AC.

Just make sure the diodes can handle the peak to peak AC voltage in reverse! (And since you're not putting an equalizing resistor across the assembly, EACH diode must be rated for the peak-to-peak reverse!) Now put your optoisolator across the diodes and again, it will turn on when the AC draws power.

However, be aware that if you are in the AC path, some power supply downstream could always be drawing power.

Another scheme, if you want to get tricky, is to put a FWB in the AC line, then pass the DC from the bridge through a few diodes and a small resistor, then put the opto across that, with a pot, to adjust at what point the opto signals the power is on.

The opto is nice because it doesn't tie your circuit to the power supply.

And finally, if it's AC, you can just stick a torroid on ONE leg, with a sensing coil, and have that trigger something...

Mike

-----  
Date: Thu, 23 Jan 2003 16:59:39 -0500  
From: "James Reid" <jreid4@earthlink.net>  
To: <qrp-l@lehigh.edu>  
Subject: [145100] Re: How Would You Clean This Roller Inductor??  
Message-ID: <000301c2c32a\$bc625980\$5964f7a5@net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I don't know how to clean the roller inductor but am waiting with anticipation for the answer since I have a few covered with tarnish myself.

Regarding the "T" tuner I've always wondered about its popularity.

If you look at the circuit it forms a high pass filter. Just the thing for passing harmonics or have I missed something?

Jim, KD3S

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Date: Thu, 23 Jan 2003 17:32:33 -0700  
From: <tlogan7@cox.net>  
To: "QRP-1" <qrp-1@Lehigh.EDU>  
Subject: [145101] K2/100 all options - built - \$1120 delivered  
Message-ID: <004101c2c340\$161b3400\$c9e96a44@ph.cox.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
          charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

K2/100 has all options; latest revisions; and the 14 matched crystals recently installed by Elecraft - as well as checked out by them. Includes Y cable connection for KAT100 and computer control. It's beautiful. \$1120 delivered CONUS. 73/Tim

-----  
Date: Thu, 23 Jan 2003 19:55:51 -0500  
From: Steve.Lawrence@ITWFEG.COM  
To: qrp-1@Lehigh.EDU  
Subject: [145102] DC Voltage Standard?  
Message-ID: <0F442311BF.C3D5D59B-0N85256CB8.00043D8F-85256CB8.00051C16@itwfeg.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Fellow homebrewers...  
I'm looking for ideas to build a simple DC voltage standard, primarily to verify several DMMs I own. Are there any simple designs out there that output one or more "reference" voltages in the fairly low voltage range (say 1 to 20 VDC)??

Thanks for your ideas!  
Steve  
aa8af

-----  
Date: Thu, 23 Jan 2003 20:14:41 -0500  
From: David Porter <aa3ur@comcast.net>  
To: NJQRP <njqrp@njqrp.org>,  
      Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [145103] Rainbow Tuner Reservations  
Message-ID: <NGBBICPOCLKMGIBGGBEAEEBJDBAA.aa3ur@comcast.net>

MIME-version: 1.0  
Content-type: text/plain; charset=iso-8859-1  
Content-transfer-encoding: 7BIT

What a response! Right now I have around 87 reservations, so if you are thinking about it, don't hesitate we have only 100 kits total. In case some people with reservations change their minds, I'll keep a waiting list of around 10 reservations over the 100.

Hurry if you want a Rainbow Tuner.

Thanks for supporting NJQRP,

Dave, AA3UR

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Date: Thu, 23 Jan 2003 19:18:58 -0600  
From: "Mike Mullins" <mmullins@mastnet.net>  
To: "QRP-L post message" <qrp-l@lehigh.edu>  
Subject: [145104] OT: Current Sensing  
Message-ID: <000901c2c346\$da562180\$778ebbd0@downstairs>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Tracy, funny you should mention this topic. I volunteered to build a current/voltage meter for a club project. My design rules were: no battery, 10-15V input, and no more than 100 mV drop through the sensing resistor. The microcontroller/LCD circuit was easy. It turns out that measuring DC current accurately was much more difficult than I ever imagined. Typical op amps don't work at all when the inputs are close to the high voltage rail. I built a voltage doubler to power the op amp to fix this, but then there's the problem of a 5V (15-10V) common mode voltage into a high gain amp and the need to reference the signal to ground. The best way to do this is with a 'high side current monitor'. Zetex sells one (ZXCT1021) which I've had on back-order from Digi-Key for 5 months but is supposed to be shipped soon. This chip (surface mount only) has a current mirror followed by a fixed-gain op amp. Maybe this is overkill for what you want, but it would certainly work.

In the meantime, I found out about rail-to-rail IO op amps, and finally put together a circuit which works adequately (but the Zetex IC would probably do better). I hooked it up to my FT817, and it displays voltage, current, and power on a 2x16 backlit LCD. Minutes before my presentation to the club last night I accidentally shorted the input supply to the microcontroller, and



it lost it's mind. There was no time to fix it, so I gave the whole presentation with a non-working demo. It was a little embarrassing, but I'll get over it.

73 de Mike KD5CMN

Tracy wrote:

>I want some things to happen when the transmitter turns on in a little jig  
>I'm building, but I don't want to use RF sensing.

>I'd like to use a current sensor to know when the amp is on, not just when  
>it's putting out RF. I was thinking of using the A/D converter in the  
>processor chip.

-----  
Date: Thu, 23 Jan 2003 19:32:52 -0600  
From: Nick Kennedy <nkennedy@tcainternet.com>  
To: "'richard\_johnson@credence.com'" <richard\_johnson@credence.com>,  
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [145105] RE: VFO Buffer Amp  
Message-ID: <01C2C316.39540660.nkennedy@tcainternet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

I had a hard time finding this exact transformer also, to my surprise. I'd have thought the Handbook would have a page of all common configurations. But I do see the same configuration in the K9AY small 160 meter loop circuit from QST (also on ARRL Web).

It gives a 9:1 impedance transformation, unbalanced to unbalanced. The lo-Z port is the VFO output and the hi-Z port goes to the FET drain. As far as explanations, other than the fact that it's trifilar, I'd just note that it's an autotransformer tapped 1/3rd of the way to give a  $3^2 = 9$  impedance transformation. Voltage at the lo-Z tap is stepped down 1/3rd and current is increased by a factor of 3.

72--Nick, WA5BDU

On Wednesday, January 22, 2003 10:53 PM, Richard Johnson  
[SMTP:richard\_johnson@credence.com] wrote:

> In the 2001 Handbook on page 17.74 is the schematic of a VFO used with  
>  
> Any insight into what is going on with that trifilar matching

> transformer would be welcome.

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Date: Thu, 23 Jan 2003 20:54:38 -0500  
From: "Jack Nelson" <jack.nelson@mindspring.com>  
To: <qrp-l@lehigh.edu>  
Subject: [145106] Re: Manhattan pads  
Message-ID: <000301c2c34b\$8e2443a0\$6501a8c0@gv07f>

Mike, I'm not sure, but I think Dave's Small Parts has a bag of 500 of the pads for a price that just can't be beat. Someone might correct me if it wasn't Dave. A Google search should locate him. I've intended to purchase some, but just haven't got around to it.

Another option I have used is the Drill bit from the NJ QRP club. It's a cutter and cuts through the circuit board foil creating a perfect pad. It mounts in a Dremmил tool, but does require that the tool be mounted in the drill press attachment. Perfect results.

Hope this give you some ideas.

73's  
Jack K5FSE  
Cumming, GA

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Date: Thu, 23 Jan 2003 19:09:29 -0700 (MST)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: qrp-l@lehigh.edu  
Subject: [145107] FOX: Way too close  
Message-ID: <Pine.LNX.4.44.0301231906080.1591-1000000@bucket.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I found both Hound piles and listened a kc or so lower and hear NOTHING! I can't even hear a esp like a Fox. There is just zero signal from both Foxes at 0205 when if they will ever be heard they will.

This is the third 0 hunt with the same Foxes. We are just too close for 40 meters at 7PM local time!

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

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Date: Thu, 23 Jan 2003 20:40:31 -0600  
From: "Doc K0EVZ" <dock0evz@earthlink.net>  
To: "qrp-l reflector" <qrp-l@lehigh.edu>  
Cc: "doc k0evz earthlink" <dock0evz@earthlink.net>  
Subject: [145108] Both FOXes Spotted  
Message-ID: <412003152424031171@earthlink.net>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII

Gang:

Both FOXes are out and running hard and fast tonite. Both have 579-589 signals into Bismarck. Larry N2WW is about 7.040 and listening up just a bit. Tom AC7A is on 7.042 and listening up a couple of KC. Not certain of exact frequencies, as I worked 'em with a Ten Tec 515 to the big loop. Go get these guys, everyone.

73,  
--Doc/K0EVZ

-----  
Date: Thu, 23 Jan 2003 21:41:58 -0500  
From: "Jack Nelson" <jack.nelson@mindspring.com>  
To: <qrp-l@lehigh.edu>  
Subject: [145109] FOXII - Twofer  
Message-ID: <000701c2c352\$2e1296e0\$6501a8c0@gv07f>

I was really surprised. Postings indicated we would have bad conditions with plenty of noise. 27 min for 2 fox, my personal best. What was surprising was the conditions..at least from Georgia. Very low noise level, good signals, and only lid calling CQ on top of the fox.

Hope everyone else had good condx as well.

73's  
Jack K5FSE  
Cumming, GA

-----  
Date: Thu, 23 Jan 2003 20:47:17 -0600  
From: "Doc K0EVZ" <dock0evz@earthlink.net>  
To: "qrp-l reflector" <qrp-l@lehigh.edu>  
Cc: "doc k0evz earthlink" <dock0evz@earthlink.net>  
Subject: [145110] Better FOX Spots [g]  
Message-ID: <412003152424717926@earthlink.net>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII

Gang:

Found FOX Larry N2WW on 7.038.7 on the K1. Tom is on 7041.8. Both have very good signals here. Here's hoping the propagation is good for everyone tonite.

73,  
--Doc/K0EVZ

-----  
Date: Thu, 23 Jan 2003 19:53:27 -0700 (MST)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: qrp-l@lehigh.edu  
Subject: [145111] FOX: Surprise!  
Message-ID: <Pine.LNX.4.44.0301231951220.1591-1000000@bucket.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Using my low dipole I worked Larry when he was a real 559! about at 0248 UTC. I'm hearing something up where Tom is but far too esp yet.

Will keep listening.

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

-----  
Date: Thu, 23 Jan 2003 22:12:21 -0500  
From: W2AGN <w2agn@w2agn.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [145112] Re: FOX: Bad Conditions again!  
Message-ID: <3E3068C5.10717.212816D@localhost>  
MIME-version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT  
Content-description: Mail message body

On 23 Jan 2003 at 14:17, Karl F. Larsen wrote:

>  
> I got another dire warning that conditions tonight during the  
> Fox Hunt will be terrible! Here are the numbers:

In spite of all this, and STRATWARM, too, managed a twofer again. Wasn't easy though. Larry was up to 599 and I called and called, and NG. Can't understand it. Finally got him after an hour of chasing the hounds. AC7A came back on first call, though, even though he was only an honest 559.

---  
+---+---+---+---+ John L. Sielke  
|W||2||A||G||N| <http://www.w2agn.net> [UPDATED]  
+---+---+---+---+ Ex-K3HLU,TF2WKT,W7JEF,W4MPC,N4JS

-----  
Date: Thu, 23 Jan 2003 20:23:40 -0700  
From: "Dave Ek" <ekdave@earthlink.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [145113] FOX: Pow! One shot!  
Message-ID: <004101c2c357\$fdde2380\$8989fea9@oldman>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="Windows-1252"

Content-Transfer-Encoding: 7bit

Tuned in on the hunt this evening about 0315Z and found Tom AC7A loud and clear at about 7.042 MHz. Tossed out a single call and bagged him! N2WW's probably too close to me(!) this evening--he's only about 70 miles away so I don't have much of a chance of hearing him. Bummer...

73 de Dave NK0E

-----  
Date: Thu, 23 Jan 2003 22:42:38 -0500  
From: David Hinerman <WD8CIV@worldnet.att.net>  
To: qrp-l@lehigh.edu  
Subject: [145114] Re: DC Voltage Standard?  
Message-ID: <5.1.1.6.1.20030123222844.00b27788@postoffice.worldnet.att.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 07:55 PM 1/23/2003 -0500, you wrote:

>Fellow homebrewers...

>I'm looking for ideas to build a simple DC voltage standard, primarily to  
>verify several DMMs I own. Are there any simple designs out there that  
>output one or more "reference" voltages in the fairly low voltage range  
>(say 1 to 20 VDC)??

Steve,

What kind of accuracy do you want? When I was in college the heat processing lab had instruments that used a mercury cell as a voltage reference. These had to be replaced periodically (every couple of years I think) but they weren't under load, so the voltage remained fairly flat.

At work we use precision zener diodes like the 1N821 as references for some of our power measurement products. The '821 is about 6 volts (6.2V I think) and is popular as a reference because you can "tune" the temperature coefficient by setting the current through it with a resistor.

Also, there are voltage reference devices in small plastic (T0-92) packages by National Semiconductor and others. For example, Digi-Key lists the National LM4040DIZ-5.0 5 volt reference, +/- 1% accuracy, 150ppm/degree C temperature coefficient, for \$1.09 in single quantities.

A simple zener dode from your favorite junkbox would do, too, if you have a trusted way of measuring it so you know exactly what voltage it is. As long as you keep it at a reasonably steady temperature and bias it from a stable

supply, it'll give a repeatable voltage.

Dave

-----  
Dave Hinerman  
WD8CIV@att.net

-----  
Date: Thu, 23 Jan 2003 21:44:04 -0600  
From: "George, W5YR" <w5yr@att.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [145115] Two More Sweeps!  
Message-ID: <01d601c2c35a\$d8426ca0\$0201a8c0@fairviewtx.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

The NE-TX Tornados got lucky again and managed to hang ten more pelts on the family farm door tonight.

Both Foxii were exceptionally strong here most of the time with S8-9 signals not uncommon on signal peaks. A little QSB and quite a bit of variation among different antennas at different times.

And nobody used more than three antennas, Tom!   <:}

73/72, George  
Amateur Radio W5YR - the Yellow Rose of Texas  
In the 57th year and it just keeps getting better!  
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
K2 #489 IC-765 #2349 IC-756 PRO #2121 IC-756 PRO2 #3235

-----  
Date: Fri, 24 Jan 2003 03:47:12 +0000  
From: k4vib@att.net  
To: qrp-1@Lehigh.EDU  
Subject: [145116] Best Place to get 10.7Mhz and 455Khz IF Xformers  
Message-ID: <20030124034712.MRV9286.mtiwmhc11.worldnet.att.net@mtiwebc19>

I need to order some of the above. I know about Dan's Small Parts but he doesn't accept PayPal or a credit card. I saw Toko coils at Digi-Key but

wasn't sure which ones I needed to get as they were listed by inductance and not function. Where else can I get them?

Thanks!

Bill  
K4VIB

-----  
Date: Thu, 23 Jan 2003 22:55:33 -0500  
From: John Farler <jfarler@peoplepc.com>  
To: qrp-l <qrp-l@Lehigh.EDU>  
Subject: [145117] Hookup wire?  
Message-ID: <3E30B935.70AB87DE@peoplepc.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Snowed in here and trying to melt some solder.  
I've had trouble finding good hookup wire,  
like that with the Ten-Tec enclosure kits, or  
with the various kits.

Does anyone know a source of good hookup wire that  
is stranded AND tinned with good insulation?

Solid hookup wire is just not very suitable,  
and most of the stranded wire I've found, including  
that from Radio Shack is not tinned, which  
is almost as bad as solid wire.

Wish Ten-Tec would sell rolls, or maybe one of  
the clubs or QRP vendors. Anyone else have  
this problem???

John Farler  
K4AVX  
jfarler@peoplepc.com

-----  
Date: Thu, 23 Jan 2003 20:09:24 PST  
From: James R Giammanco <n5ib@juno.com>  
To: qrp-l@Lehigh.edu  
Subject: [145118] Free: ball bearings for "JJ-38" key  
Message-ID: <20030123.220311.4623.1.n5ib@juno.com>



Refurbishing a "Japan Key" picked up for \$3 (along with assorted real J-38 parts) in a cigar box at a recent hamfest, I picked up a pack of the requisite 1/8" chrome plated steel balls for the bearings.

I've used all I need, and have about 90 left over. If anyone needs a few to resurrect a key, they're free for a SASE. Just send me an e-mail to reserve a set and I'll send you instructions where to send said SASE. Let me know how many you need. It takes 8 to fully populate the two bearings.

I've already formed one complete J-38 from the pile (made a wood Navy knob for it), so have recouped the capital outlay, nearly have enough parts to complete the JJ-38, and have most of the parts for two more J-38's. One of which is a Lionel, but some barbarian hacksawed a chunk out of the rear of the base. It will take some creativity to make that one play again.

72

Jim N5IB

key collection at <<http://www.qsl.net/n5ib>>

---

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---

Date: Thu, 23 Jan 2003 22:18:53 -0600  
From: "Clifford, Rick" <[rick.clifford@eds.com](mailto:rick.clifford@eds.com)>  
To: [qrp-l@lehigh.edu](mailto:qrp-l@lehigh.edu)  
Subject: [145119] Rock-Mite output amp hotter than heck  
Message-ID: <E2455C8B4A4AD21187C700805F31BC23196B7667@USSAM202>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"

Hi QRPers,

I recently built a 40m Rock-Mite and have noticed that the 2N2222 'power' amplifier gets extremely hot after only a minute or so of keying. Is this normal? It seems odd to me that a 0.5W output should generate so much heat.

I have also noticed a strange transmitting phenomenon: When transmitting, I never see forward power (as measured on my MFJ antenna tuner). Yes, I have set the power level switch to the low (0-30W) range. A 0.5 W output should deflect the needle enough to see. The MFJ does register reflected power, such as when I bypass the tuner or change the inductance/capacitance away

from the matched settings. I know the forward power circuit works, as I have seen appropriate deflections when transmitting with my base rig (ICOM IC-746).

Any ideas why no forward power is indicated? I'm wondering if the overheating and the lack of forward power are related in some way. I should point out that when transmitting into the correctly adjusted antenna tuner, I see no forward OR reflected power.

73 ES TNX,

Rick  
KF6UEB

-----  
Date: Thu, 23 Jan 2003 22:23:27 -0600  
From: "George, W5YR" <w5yr@att.net>  
To: <Steve.Lawrence@ITWFEG.COM>,  
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [145120] Re: DC Voltage Standard?  
Message-ID: <021b01c2c360\$585c0ea0\$0201a8c0@fairviewtx.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Steve, start with a brand new, fresh zinc/carbon dry cell or battery of any convenient size. The terminal voltage with NO LOAD is a hair over 1.5 volts - don't recall exactly, but my "lab standard" cell measures 1.517 volts. That will give you a start on the low DC end.

73/72, George  
Amateur Radio W5YR - the Yellow Rose of Texas  
In the 57th year and it just keeps getting better!  
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
K2 #489 IC-765 #2349 IC-756 PRO #2121 IC-756 PRO2 #3235

----- Original Message -----  
From: <Steve.Lawrence@ITWFEG.COM>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Sent: Thursday, January 23, 2003 6:55 PM  
Subject: DC Voltage Standard?

> Fellow homebrewers...  
> I'm looking for ideas to build a simple DC voltage standard,  
primarily to

> verify several DMMs I own. Are there any simple designs out there  
that  
> output one or more "reference" voltages in the fairly low voltage  
range  
> (say 1 to 20 VDC)??

-----  
Date: Thu, 23 Jan 2003 22:26:07 -0600  
From: "George, W5YR" <w5yr@att.net>  
To: <jack.nelson@mindspring.com>,  
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [145121] Re: FOXII - Twofer  
Message-ID: <023101c2c360\$b7dbb060\$0201a8c0@fairviewtx.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="Windows-1252"  
Content-Transfer-Encoding: 7bit

You had a good signal into North Texas, Jack.

Don't believe everything that gets posted about "conditions." <:}

73/72, George  
Amateur Radio W5YR - the Yellow Rose of Texas  
In the 57th year and it just keeps getting better!  
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
K2 #489 IC-765 #2349 IC-756 PRO #2121 IC-756 PRO2 #3235

----- Original Message -----  
From: "Jack Nelson" <jack.nelson@mindspring.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Sent: Thursday, January 23, 2003 8:41 PM  
Subject: FOXII - Twofer

> I was really surprised. Postings indicated we would have bad  
conditions with  
> plenty of noise. 27 min for 2 fox, my personal best. What was  
surprising was  
> the conditions..at least from Georgia. Very low noise level, good  
signals,  
> and only lid calling CQ on top of the fox.  
>  
> Hope everyone else had good condx as well.  
>

> 73's  
> Jack K5FSE  
> Cumming, GA  
>  
>  
>

-----  
Date: Thu, 23 Jan 2003 23:30:26 -0400  
From: "Prof. Arnaldo Coro Antich" <inforhc@ip.etcusa.cu>  
To: <jreid4@earthlink.net>  
Cc: <qrp-L@LeHigh.edu>  
Subject: [145122] Re: How Would You Clean This Roller Inductor??  
Message-ID: <005e01c2c358\$f87d6120\$02000a0a@user>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Dear amigo:

You are absolutely right about the  
quite negative characteristics of the  
T network matching system ( I refuse to call those devices ""antenna  
tuners"".)

In the March 2003 issue of CQ Radio Amateur Magazine Antenna Column, I have  
an article about the improperly named box that is sold to us as  
an antenna tuner, but that many years ago E.F. Johnson Co. engineers told  
their sales people that it was a  
""MATCHBOX"" !!!!

All my MATCHBOXES are always at least a PI network, ( low pass filter action  
plus wide range of matching, plus reversibility ) or better yet  
a PI-L network

73 amigo Jim and you are absolutely right ... the T network will pass not  
only the harmonics of higher order but also any other ""non essential  
radiations"" higher in frequency than your intended transmitting frequency  
!!!

YOur friend in Havana and QRP enthusiast  
Arnie Coro  
C02KK

Found quite often on 30 meters around 10.105 and 10.116 with the QRP Magic  
Rig , and now also followed by C02FU and C02UG that are learning about 30  
meters DX and hopefully about QRP too

----- Original Message -----

From: "James Reid" <jreid4@earthlink.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Sent: Thursday, January 23, 2003 5:59 PM

Subject: Re: How Would You Clean This Roller Inductor??

> I don't know how to clean the roller inductor but am waiting  
> with anticipation for the answer since I have a few covered with  
> tarnish myself.  
>  
> Regarding the "T" tuner I've always wondered about its popularity.  
>  
> If you look at the circuit it forms a high pass filter. Just the thing  
> for passing harmonics or have I missed something?  
>  
> Jim, KD3S  
>  
>

-----  
Date: Thu, 23 Jan 2003 22:25:41 -0800  
From: "Trevor Jacobs" <kg6cyn@earthlink.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [145123] K1/FT-817 FOXII obseervations...  
Message-ID: <00a801c2c371\$6b8b3080\$0ea0b2d1@tjacobs>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hi Gang,

Did a bit of A/B comparison tonight during the FOXII Hunt between the K1 and the FT-817. First off, I'm NOT trying to start a flame war here, just stating my observations and opinions, so lets not get into a "my rig is better than your rig" diatribe.

First off, I'd like to thank both FOXII for a fun fox hunt evening! Both of you were a true 599 for the first part of the hunt into Burbank tonight! So much for propagation reports ;-)

Now, after I'd pounced on both FOXII I thought it'd be fun to compare the receiver in the K1 to the FT-817, so I hooked them up with an A/B antenna switch to compare signals. The K1 is stock and the FT-817 has the Collins 500 Hz mechanical CW filter. Here are the observations:

- 1.The K1 is much more sensitive in both the wide and the narrow IF filter setting than the FT-817
- 2.The K1 has a MUCH quieter receiver than the FT-817

### 3.The K1 seems less prone to background noise

Now, the question is why? My guess is that since the FT-817 covers DC to Daylight that some compromises had to be made in the design. The K1 covers 4 bands max and is CW mode only, so optimizing the rig for this mode and 4 bands is probably a more straight forward task than a DC to Daylight multi mode design within the constraints of the FT-817. But, the K1 does a fantastic job as a 4 band CW rig, and if this is the primary mode of choice, it's my opinion that it's a better choice hands down. It a much better "CW" rig than the FT-817, and that's my bottom line in the comparison...

The only negative thing that I have found on the K1 is that the frequency display doesn't always indicate the operating frequency. I've seen it off as much as 400 Hz. Not a huge deal, but it is an issue. I guess this is because it's kind of interpolating the "actual" frequency based on it measurement of "the VFO frequency", "the Band Setting" and "the +/- calibration frequency information stored during calibration". This is not a major issue, and 400 Hz seems to be the worst case that I've seen so far. Seems to get worse as the rig is left on for some time, so I'm wondering if the pre-mix oscillator is drifting a bit with temperature? BTW this was checked with a calibrated HP frequency counter...

Have any of the rest of you done a side by side A/B of these rigs? Just wondering what your results were. Take care...

73's Trev KG6CYN

<http://home.earthlink.net/~kg6cyn>

<http://www.qsl.net/kg6cyn>

-----  
Date: Fri, 24 Jan 2003 05:06:39 -0600  
From: Karl Kanalz <kkanalz@gcecispc.com>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [145124] RE: DC Voltage Standard  
Message-ID: <01C2C366.B5F7ED80@KKANALZ>

A FRESH zinc-carbon cell will deliver 1.556 volts DC with no load (or at least, a high-impedance load such as a VTVM or FET voltmeter). Heathkit used to use this as a "standard" to calibrate their VTVMs built by their customers - I think there was even a "calibration mark" on the meter face.....

Karl K - W8TIF  
McKinney, Texas

-----Original Message-----

From: George, W5YR [SMTP:w5yr@att.net]  
Sent: Thursday, January 23, 2003 10:23 PM  
To: Low Power Amateur Radio Discussion  
Subject: Re: DC Voltage Standard?

Steve, start with a brand new, fresh zinc/carbon dry cell or battery of any convenient size. The terminal voltage with NO LOAD is a hair over 1.5 volts - don't recall exactly, but my "lab standard" cell measures 1.517 volts. That will give you a start on the low DC end.

73/72, George  
Amateur Radio W5YR - the Yellow Rose of Texas  
In the 57th year and it just keeps getting better!  
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
K2 #489 IC-765 #2349 IC-756 PRO #2121 IC-756 PRO2 #3235

----- Original Message -----

From: <Steve.Lawrence@ITWFEG.COM>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Sent: Thursday, January 23, 2003 6:55 PM  
Subject: DC Voltage Standard?

> Fellow homebrewers...  
> I'm looking for ideas to build a simple DC voltage standard,  
primarily to  
> verify several DMMs I own. Are there any simple designs out there  
that  
> output one or more "reference" voltages in the fairly low voltage  
range  
> (say 1 to 20 VDC)??

-----  
Date: Fri, 24 Jan 2003 06:09:18 -0500  
From: "Charles Mabbott" <aa8vs@msn.com>  
To: rsrolfne@atnet.net, qrp-l@Lehigh.EDU  
Subject: [145125] Re: Building with old parts - Question?  
Message-ID: <F13WtCQra2BiLtjGC5g0000577a@hotmail.com>

Mime-Version: 1.0

Content-Type: text/plain; format=flowed

Used to and still do will use pencil erasers. The larger type with a split in it works great for cleaning leads prior to soldering. They are easy to trim into a shape to fit a specific place. Good luck!

73 oo

Chuck AA8VS

"Whoever said the pen is mightier than the sword obviously never encountered automatic weapons."

<http://68.43.100.7:81/aa8vs>

>From: Bob W7AVK <rsrolfne@atnet.net>

>Reply-To: rsrolfne@atnet.net

>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

>Subject: Building with old parts - Question?

>Date: Thu, 23 Jan 2003 08:13:23 -0800

>

>Good Day Group - A question asking for any Hint or Kink on soldering  
>some junk box parts. I have several MOLEX type connectors that use tin  
>platted soldering pads. These have been around for years and the tin  
>seems to have tarnished to where the solder finds it difficult to  
>"wet" the joint.

>

>Is there any easy way to clean the connector's tin plating?

>

>What I am hoping to find is a Hint like using a BOUNCE fabric  
>softener cloth in with a rig to remove the cigarette smell. What  
>a great idea and it works too.

>

>thanks,

>

>73 Bob W7AVK

---

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-----  
Date: Fri, 24 Jan 2003 06:26:20 -0500  
From: "Tom Palmer" <n1tp@swfla.rr.com>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [145126] Re: Two More Sweeps!  
Message-ID: <000301c2c39b\$6b9a0b80\$6b2a0843@swfla.rr.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="Windows-1252"  
Content-Transfer-Encoding: 7bit

I move for adoption of the following new Rule for the QRP-L  
Foxhunts:

Each "Pesky Texan" who ends the hunting season in the top  
tier of number of pelts bagged shall automatically have one  
(1) pelt deducted from his pelt total (to level the playing  
field by partially eliminating the wholly unfair geographic  
advantage enjoyed by each "Pesky Texan" and suffered by all  
other Hounds). (Hi!)

Tom, N1TP  
Naples, Florida

-----  
Date: Fri, 24 Jan 2003 06:27:10 -0500  
From: "brian" <brian@iquest.net>  
To: "Flying Pigs" <fpqrp-l@fpqrp.com>, "QRP-L" <qrp-l@Lehigh.EDU>  
Subject: [145127] SMT Cap Offer (390 pf)  
Message-ID: <005901c2c39b\$89f7f0b0\$996b2bd1@bmurrey2K>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Gang,

The SMT cap deal I was offering is now closed. If you got email from  
me saying send in your order, you are covered.

After the smoke clears, I'll put out another note if I have any spares  
left. I might have some canceled orders.

Jerry from IA...yours shipped today.

```
=====
KB9BVN/QRP - New Whiteland IN - EM69WN
QRP-ARCI #10223 QRP-L #1540 FIST #5695
FISTS CC #764 - Proud Member ARRL
HEATH HW-9 @ 2W or NORCAL 40A @ 1.3W
INTO INFAMOUS AF4PS ATTIC DIPOLE
SOC #400 AND FLYING PIGS QRP #-57
=====
```

```
-----

Date: Fri, 24 Jan 2003 06:29:28 -0500
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <Steve.Lawrence@ITWFEG.COM>,
    "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [145128] Re: DC Voltage Standard?
Message-ID: <00a101c2c39b$e17e6760$0300a8c0@charter.net>
MIME-Version: 1.0
Content-Type: text/plain;
    charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
```

```
> I'm looking for ideas to build a simple DC voltage standard, primarily
> to
> verify several DMMs I own. Are there any simple designs out there that
> output one or more "reference" voltages in the fairly low voltage range
> (say 1 to 20 VDC)??
>
> Steve
> aa8af
```

Well depends on how accurate you want to do it.

First off, if it's just to get meters 'close', I'd build a cascaded reference.

First a voltage like a 7812, then feed that to a small 'constant current' regulator of an LM317 and use that to feed a precision zener/resistor and use that as my 'standard'. Put a temperature sensor on it and you probably can get something pretty decent for home use. You could even put a voltage follower op-amp on the zener so that your meter wouldn't affect it with loading that much.

But that may be overkill. How much do you actually need?

Mike

-----  
Date: Fri, 24 Jan 2003 07:32:02 -0600  
From: W2EB <w2eb@twcnny.rr.com>  
To: k4vib@att.net, qrp-l@lehigh.edu  
Subject: [145129] Re: Best Place to get 10.7Mhz and 455Khz IF Xformers  
Message-ID: <3E314052.D71A5434@twcnny.rr.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Bill,

Mouser Electronics has them in a variety. Go to:

[http://www.mouser.com//index.cfm?handler=fra\\_pdfset&pdffile=351](http://www.mouser.com//index.cfm?handler=fra_pdfset&pdffile=351)

GL & 73,

Bill  
W2EB

k4vib@att.net wrote:

>  
> I need to order some of the above. Where else can I get them?  
>  
> Thanks!  
>  
> Bill  
> K4VIB

--  
"Thomas Hodgkin died of natural causes"

-----  
Date: Fri, 24 Jan 2003 07:37:34 -0500 (EST)  
From: Chris Cartwright <ccart@phideaux.com>  
To: QRPL List <qrp-l@lehigh.edu>  
Subject: [145130] OT: SMT work  
Message-ID: <Pine.LNX.4.33.0301240729240.22723-100000@dns.phideaux.com.>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

A current microwave (QRPp 40mW) project requires me to move some 0402 size caps and resistors around. I've got a small Weller iron (that looks \*HUGE\* next to these things) a magnifier and some pointy tweezers. Just wondering if there's a better way. Short of an SMT rework station I don't have too many ideas. I've done 1208's before without any real trouble, but these thing a literally about the size of the "dot" on the period key of your keyboard.

```
-- Chris Cartwright,   Unix Administrator |      ccart@phideaux.com      --
-- N3XRV      ARRL-VE   Norcal Zombie #163 |      Oxford, PA 19363 FM29as   --
-- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI #9271 --
```

-----

Date: Fri, 24 Jan 2003 12:54:08 GMT  
From: Thomas Jennings <jennings@eznet.net>  
To: qrp-l@lehigh.edu  
Subject: [145131] Fox: Twofer fer me last night...  
Message-ID: <20030124125408.16970.qmail@eznet.net>  
Mime-version: 1.0  
Content-type: text/plain; charset="us-ascii"

Hounds...  
Bagged two tonight! First time I did it in a while but it was tough.  
N2WW was fairly strong about S7-9 but it took a lot of calling  
to get his attention. AC7A was very weak the whole time and lots of  
QSB on him. But persistence paid off!  
73  
Tom kv2x

-----

Date: Fri, 24 Jan 2003 09:30:22 -0500  
From: Michael Babineau <michael.babineau@sympatico.ca>  
To: qrp-l@Lehigh.EDU  
Subject: [145132] RS 5" Mag Mount Clearance (3/8X 24 thread)  
Message-ID: <5ED97A6A-2FA8-11D7-BA76-00039309268A@sympatico.ca>  
Mime-Version: 1.0 (Apple Message framework v551)  
Content-Type: text/plain; charset=US-ASCII; format=flowed  
Content-Transfer-Encoding: 7bit

Folks :

I happened to be in Vermont last weekend and popped into a Radio Shack and found a 5" Mag Mount with a standard 3/8 X 24 thread at a clearance price of \$12.47.

This is just the thing I was looking for to slap a Hamstick onto the roof

of the car when parked for a little QRP car-portable operating. The quality seems pretty good .. it looks just like the magnet and hardware on my much more expensive triple mag mount.

I'm not sure if this has been discontinued and thus the clearance, but if you are interested in checking this out at your local RS here are the details :

CB Antenna Magnet Mount RS 21-997, regular price \$24.99, clearance price \$12.47.

Michael VE3WMB

P.S. A question for those of you that use a magnet mount on your car for HF. Do you you use a ground strap of some kind (I always have) and if not what kind of match and performance are you getting??

-----  
Date: Fri, 24 Jan 2003 09:50:54 -0600  
From: Chuck Carpenter <w5usj@9plus.net>  
To: rick.clifford@eds.com,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [145133] Re: Rock-Mite output amp hotter than heck  
Message-ID: <3.0.2.32.20030124095054.007e9100@mail.9plus.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Rick,

I've found that R-Ms are quite sensitive to mismatched loads. Even a small mismatch will cause the PA to get hot. Try connecting the output to a known good and accurate 50 ohm load using as short a length of coax as you can. A load mounted inside a mating connector would be good. If the PA does not get hot doing this then it sounds like a mismatched antenna load

problem.

I'd suggest not using the dummy load in your MFJ. The one in my MFJ-969 is almost as good as an antenna as an outside dipole.

>I recently built a 40m Rock-Mite and have noticed that the 2N2222 'power'  
>amplifier gets extremely hot after only a minute or so of keying. Is this  
>normal? It seems odd to me that a 0.5W output should generate so much heat.

Don't know about the meter reading situation except that I don't use the meter in my MFJ-969. It's next to useless at QRP levels. I use a Welz SP-15 M with 2.5 and 20 Watt scales ahead of the transmatch. (Also has a 200 Watt scale that gets used once in a while.)

Chuck Carpenter, W5USJ, Point, Rains Co., TX - EM22cv, NETXQRP #1  
Rock-Mites on 80, 40, 30, 20 and 15 Meters  
QRP-ARCI #5422, QRP-L #1306, QRPP-I #115, ARS #1280, SOC #57  
Zombie #759, COG #11, 6 Club #201, NETXQRP <http://www.netxqrp.org>

-----  
Date: Fri, 24 Jan 2003 08:53:59 -0700  
From: "KL7FDQ, Wayne Leman" <KL7FDQ@rangeweb.net>  
To: <qrp-1@lehigh.edu>  
Subject: [145134] What is "X"?  
Message-ID: <007201c2c3c0\$dfc4f7c0\$023d1dac@waynecomputer>  
MIME-Version: 1.0  
Content-Type: text/plain;  
          charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I got back on the air a few weeks ago after several years of absence. I've been hearing a number of CW ops now using "X" as some kind of abbreviation, esp. at the end of their transmission. Could any of you tell me what the "X" means? CW has been my main mode for many years (I've been a ham for 40 years), but I haven't been able to figure out "X".

Tnx,  
73,  
Wayne

-----  
Wayne Leman  
<http://www.qsl.net/kl7fdq>

Date: Fri, 24 Jan 2003 10:07:48 -0600  
From: Chuck Carpenter <w5usj@9plus.net>  
To: Rock-Mite\_Group@yahoogroups.com, qrp-1@lehigh.edu  
Subject: [145135] L1 goes pffssst [L1 Alternative Part]  
Message-ID: <3.0.2.32.20030124100748.007f7c70@mail.9plus.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Having heard about several 10 uH L1 chokes vaporizing in R-Ms I wondered about an alternative part. Something for folks who prefer not to wind toroids.

Mouser has a part by the same supplier, Fastron, that should do the job.

The stock 10uH part has a maximum current rating of 230 mA. The suggested part, Mouser 434-23-100, has a current rating of 680 mA.

The part is .1 inch longer and .05 inch bigger around. It will still fit OK.

Chuck Carpenter, W5USJ, Point, Rains Co., TX - EM22cv, NETXQRP #1  
Rock-Mites on 80, 40, 30, 20 and 15 Meters  
QRP-ARCI #5422, QRP-L #1306, QRPP-I #115, ARS #1280, SOC #57  
Zombie #759, COG #11, 6 Club #201, NETXQRP <http://www.netxqrp.org>

-----  
Date: Fri, 24 Jan 2003 08:08:38 -0800  
From: "Frank King" <fking@oregonvos.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [145136] T31MY  
Message-ID: <000501c2c3c3\$4262b780\$5956fea9@fking>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="Windows-1252"  
Content-Transfer-Encoding: 7bit

T31MY was on 10.103.5 mHz at 1557Z Got him with 5 watts from central Oregon Coast.

Frank  
AA7XA

-----  
Date: Fri, 24 Jan 2003 08:14:10 -0800  
From: "Bob Tellefsen" <n6wg@earthlink.net>  
To: <qrp-1@lehigh.edu>  
Subject: [145137] CQ WW 160m cw contest  
Message-ID: <MABBJOEABOILMKCJCLFCEEAEAAAA.n6wg@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I'll be working the contest this weekend, hunting for new states.  
I'm up to 41 states for QRP WAS now, and hungry for more.

I particularly like the 160m contests, as they are not quite  
as frantic as some of the higher band contests.  
Come on in and try your luck. QRP works surprisingly well on 160m.  
Hope to hear a lot of the usual suspects.  
73, Bob N6WG/qrp

-----  
Date: Fri, 24 Jan 2003 11:10:59 -0500  
From: brewerj@squared.com  
To: qrp-1@Lehigh.EDU  
Subject: [145138] RE: How would you clean this tuner?  
Message-ID: <OFFCBAA42D.5702AE0A-ON85256CB8.0058C67D@CIS.SQUARED.COM>  
MIME-Version: 1.0  
Content-type: text/plain; charset=us-ascii

Mark asks:

>Thanks for reading.

>                I'm in the process of building a tuner. I have all the parts - EF  
>Johnson variable caps, and a real nice roller inductor. The roller inductor  
>has been sitting in a box for years, and has quite a buildup of tarnish.

If it is a silver plated coil (and I suspect it is), you very likely will  
do more damage than good, in trying to clean it. Silver Oxide is one of  
the few oxides that is almost as conductive as its base metal.

In other words...dont mess with it and you'll be fine!

: -)

John K5MO



-----  
Date: Fri, 24 Jan 2003 10:10:53 -0600  
From: KD5NWA <KD5NWA@cbayona.com>  
To: jreid4@earthlink.net,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [145139] Re: How Would You Clean This Roller Inductor??  
Message-ID: <5.2.0.9.0.20030124100004.00a808c0@pop.cbayona.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

You are correct, not only that but you can mistune it so you end up with low SWR but a lot of the power is heating up your tuner components instead of going to your antenna. I personally like the Z-Match link coupled tuners, they give you an extra stage of filtering and are very efficient if built with good components, and no lossy baluns when using balanced antennas.

The L tuner is also very good and it can be low pass filter in one mode.

One should never clean silver plated wires with an abrasive, it takes too much silver, even most chemical cleaners like TarnX work by removing the silver with buffered acids, but it removes less than sandpaper.

At 03:59 PM 1/23/2003, James Reid wrote:

>I don't know how to clean the roller inductor but am waiting  
> with anticipation for the answer since I have a few covered with  
>tarnish myself.  
>  
>Regarding the "T" tuner I've always wondered about its popularity.  
>  
>If you look at the circuit it forms a high pass filter. Just the thing  
>for passing harmonics or have I missed something?  
>  
>Jim, KD3S

Cecil  
KD5NWA

-----  
Date: Fri, 24 Jan 2003 09:17:50 -0500  
From: "James P. Osburn, P.E." <j.p.osburn@ieee.org>  
To: "List; QRP, QRP Mailing List" <qrp-l@lehigh.edu>  
Subject: [145140] Re: PCB Printer  
Message-ID: <000701c2c3c4\$43b5f600\$3f8acccf@bbbcomputer>

MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

The consensus is that the idea of using the CDR printer to make PCB's wouldn't work for a number of reasons.

The two major ones are

- Inkjet ink is water based and would be washed away by the etchant.
- There's no coating on the PCB to hold the ink and it would go everywhere.

Jim, WD9EYB

-----  
Date: Fri, 24 Jan 2003 11:22:44 -0500  
From: W2AGN <w2agn@w2agn.net>  
To: kg6cyn@earthlink.net,  
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [145141] Re: K1/FT-817 FOXII obseervations...  
Message-ID: <3E312204.15646.4E641E1@localhost>  
MIME-version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT  
Content-description: Mail message body

On 23 Jan 2003 at 22:25, Trevor Jacobs wrote:

>  
> Have any of the rest of you done a side by side A/B of these rigs? Just  
> wondering what your results were. Take care...  
>

Well, I have quite a few rigs. When I really want to not mess around, I use the K2. Hands down, it is the best receievr in the bunch. I have done the fox hunts this year with everything from the K2 to my HT18/S53A combo.(actually got 2 foxes with it!).

The FT-817 receiver is noisy. Also I noticed, as you did, that it lacks sensitivity, compared to all the others. A couple of times I started with this, and switched to the K2 because I could not hear the fox on the 817. It was an honest 559 on the K2.

I used the old QRP++ for 2 hunts. I had to put in the 20db pad at all times to avoid overloading, otherwise it did OK.

Used my new ArgoV (Argonaut 516) on a couple. I am sorry, but I am NOT impressed with this receiver. Even with the DSP filter "cranked down," still had a lot of desensitization from nearby signals. No RF gain, so had to use the attenuator. Seems a shame to still be using QRP+ technology in a 2002 rig!

Also used the Argonaut 509, with the 208 Audio Filter. For some reason, this seems to be a great combination. I thhink that is because the filter is before the AGC.

Haven't tried the K1, although I find it to be excellent (far better than most, except the K2). I will use it next week in the hunt.

As for the S53A....makes one appreciate modern receivers, even with their relative shortcomings.

---  
+-----+ John L. Sielke  
|W||2||A||G||N| http://www.w2agn.net [UPDATED]  
+-----+ Ex-K3HLU,TF2WKT,W7JEF,W4MPC,N4JS

-----  
Date: Fri, 24 Jan 2003 11:30:01 -0500 (EST)  
From: George Gingell <k3tks@u1.abs.net>  
To: QRP List <qrp-l@Lehigh.EDU>  
Subject: [145142] Re: How would you clean this roller inductor?  
Message-ID: <20030124110905.P5143-100000@u1.abs.net>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

First it depends on the overall cleanliness of the inductor.

If really cruddy, I would wash it in hot soapy water and rinse thoroughly.

If plastic not involved, you can even run it thru the dishwasher.

Then blow dry with hair dryer or other forced air device.

I would use Tarn-x or other similar liquid Silver Oxidation Remover on the coils. Paste types not recommended as they actually remove metal from the silver plated components.

Then I would lubricate the bearings with Tri-Flow (Teflon Lubricant) similar to WD-40 (Silicon Spray) only better. a light film may actually

protect the silver from further oxidation.

FYI- For those who wonder at the soap and water cleaning of electrical components and relay contacts. I spent many years cleaning and repairing Telephone PBX Switching Equipment which had been contaminated by close association with Copier machine Toners. Bell Labs, actually developed the decontamination process. O.K. we did use Distilled Water in the sprayers and a Shop Vac to recover the old crud and water. Yes, it was done with the equipment powered DOWN. :^}

Some of this also applies to other old Radio/Electronic Gear. Just beware of using Alcohol or Mineral Spirits for cleaning parts and painted surfaces. It will remove labels and printed markings and will dissolve some types of Plastics. Caution on using too much for same reasons.

Oh, Yes, don't try to wash Transformers, as you will not likely be able to remove all of the water. Old transformers can be very expensive to replace!

QRPp Dx Tu, (C) 2002 K3TKS

Sir George, The First :^}

72 ES QRP DX TU (C) 1986, G. "Danny" Gingell, K3TKS@ abs.net  
QRP A.R.C.I. Board of Director Member.  
Gingell & Company, Ltd. Small Business Telephone Systems, Handyman Services,  
Commercial & Residential Locksmith Services (301) 572-6789 Office & Fax  
George D. Gingell, Jr. 3052 Fairland Road, Silver Spring, MD 20904-7117

-----  
Date: Fri, 24 Jan 2003 11:32:32 -0500  
From: Alex <kr1st@amsat.org>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [145143] Homebrew ladder line?  
Message-ID: <3E316AA0.B78F7242@amsat.org>  
MIME-version: 1.0  
Content-type: text/plain; charset=us-ascii  
Content-transfer-encoding: 7bit

Hi there,

Maybe a silly question, with the availability of cheap ladder line, is it still worth it to make your own ladder line?

73,

--Alex KR1ST

-----  
Date: Fri, 24 Jan 2003 10:44:10 -0600  
From: KD5NWA <KD5NWA@cbayona.com>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [145144] Re: DC Voltage Standard?  
Message-ID: <5.2.0.9.0.20030124103927.00a8b1b0@pop.cbayona.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

There are voltage reference IC's and they only cost a couple of dollars. There are different models with different voltages, and are fully temperature compensated so they give you a very precise voltage source, that you don't have to replace parts or make multiple device circuits.

If you want to get fancy, then with a precision OP amp and some good resistor you can make the calibrator output several very precise voltages.

At 05:29 AM 1/24/2003, Mike Yetsko wrote:

> > I'm looking for ideas to build a simple DC voltage standard, primarily  
> to  
> > verify several DMMs I own. Are there any simple designs out there that  
> > output one or more "reference" voltages in the fairly low voltage range  
> > (say 1 to 20 VDC)??  
> >  
> > Steve  
> > aa8af  
>  
> Well depends on how accurate you want to do it.  
>  
> First off, if it's just to get meters 'close', I'd build a cascaded  
> reference.  
> First a voltage like a 7812, then feed that to a small 'constant current'  
> regulator of an LM317 and use that to feed a precision zener/resistor  
> and use that as my 'standard'. Put a temperature sensor on it and you  
> probably can get something pretty decent for home use. You could  
> even put a voltage follower op-amp on the zener so that your meter  
> wouldn't affect it with loading that much.  
>

>But that may be overkill. How much do you actually need?

>

>Mike

Cecil  
KD5NWA

-----  
Date: Fri, 24 Jan 2003 11:16:02 -0600  
From: Nick Kennedy <nkennedy@tcainternet.com>  
To: "'KL7FDQ@rangeweb.net'" <KL7FDQ@rangeweb.net>,  
Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [145145] RE: What is "X"?  
Message-ID: <01C2C399.FB9A4800.nkennedy@tcainternet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

Not sure but I'll take a shot.

Could they be saying TU (Thany You) and slurring the letters together?  
I've heard it done.

Reminds me of forty years back, I asked my mentor why so many folks sent NST when tuning up. Turns out they were saying "TEST" and running the T and E together. After I realized that, it seemed perfectly normal that NST meant TEST.

72--Nick, WA5BDU

On Friday, January 24, 2003 9:54 AM, KL7FDQ, Wayne Leman  
[SMTP:KL7FDQ@rangeweb.net] wrote:  
> I got back on the air a few weeks ago after several years of absence.  
I've  
> been hearing a number of CW ops now using "X" as some kind of  
abbreviation,  
> esp. at the end of their transmission. Could any of you tell me what the  
"X"  
> means? CW has been my main mode for many years (I've been a ham for 40  
> years), but I haven't been able to figure out "X".

-----  
Date: Fri, 24 Jan 2003 12:15:51 -0500  
From: David Hinerman <WD8CIV@worldnet.att.net>

To: qrp-1@lehigh.edu  
Subject: [145146] RE: OT: Current Sensing  
Message-ID: <5.1.1.6.1.20030124120422.00a70a00@ipostoffice.worldnet.att.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

>Actually, I just need to sense for an INCREASE in current. It's driving a  
>12VDCmotor, and when the motor reaches its stop point it should draw more  
>current. Sensing that should give the processor data to turn off the motor  
>or go the other direction.

Tracy,

Ah, sensing stall current. An ancient and time-honored tradition. I have an electronic cat from the 1980s that will complain when it runs into an obstacle - which is determined by the drive motors drawing more current. Your A/D converter is an excellent way to do that.

>I looked at something called a 'High side' current sensing device from  
>Maxim. Neat sucker, but it's not available for a few months. I was figuring  
>something like a .1-ohm power resistor in the motor supply line and a single  
>sense point. I don't need to compare the voltage before the drop, I just  
>need to measure the voltage as the motor is turning, and continue sampling  
>it until it senses a drop. Does that make sense?

Perfectly. As long as the high side voltage is reasonably well regulated, it sounds like an excellent idea.

>I have some rail-to-rail op amps I was going to use for the amp. LMC6482 -  
>it was a great chip for audio filters as a replacement for 741's ...

To paraphrase, "Use 'em if you got 'em." But you can use a resistive divider to bring the motor voltage down to where it's in range of any old buffer amp, or even your A/D input. A rail-to-rail amp is hardly necessary. (This is assuming your motor is ground referenced.) Be sure to lowpass filter the signal, and maybe even add spike suppression (like a 5 volt zener) across the voltage signal. Motors are pretty noisy beasts. You may even want to do some software averaging of the sampled signal so glitches and spikes don't cause a false trigger. An easy software filter is made by adding 256 samples (each 8 bits) to a 2-byte sum, then reading the upper byte of the sum. That 8-bit value is the average, and you didn't even need to do a divide operation.

>So much fun! And Thanks!

No problem. I'm a newbie when it comes to RF, but I've been doing power instrumentation for over 20 years now.

Good luck!

Dave

-----  
Dave Hinerman  
WD8CIV@worldnet.att.net

-----  
Date: Fri, 24 Jan 2003 10:25:55 -0700  
From: "Chris Trask" <chistrask@earthlink.net>  
To: <ccart@phideaux.com>,  
      "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [145147] Re: SMT work  
Message-ID: <013601c2c3cd\$a7d28960\$38c09d40@ctrask>  
MIME-Version: 1.0  
Content-Type: text/plain;  
              charset="Windows-1252"  
Content-Transfer-Encoding: 7bit

On Friday, January 24, 2003 5:37 AM, Chris Cartwright asked:

>  
> A current microwave (QRPp 40mW) project requires me to move some  
> 0402 size caps and resistors around. I've got a small Weller iron  
> (that looks \*HUGE\* next to these things) a magnifier and some  
> pointy tweezers. Just wondering if there's a better way. Short  
> of an SMT rework station I don't have too many ideas. I've done  
> 1208's before without any real trouble, but these thing a  
> literally about the size of the "dot" on the period key of your  
> keyboard.  
>

I use two soldering irons. Cheaper than buying a dedicated SMT iron and all those fancy tips.

Chris

          /-----.\  
      /      What's all this      \  
     /  extinct stuff, anyhow?  \  
     \-----/'  
\_  |/  
oo\  
(\_\_)\      \_  
  
                  High Performance Mixers and  
                  Amplifiers for RF Communications  
  
                  Chris Trask / N7ZWY  
                  Principal Engineer  
                  Sonoran Radio Research  
                  P.O. Box 25240



Tempe, Arizona 85285-5240

IEEE Member #40274515

Email: [chistrask@earthlink.net](mailto:chistrask@earthlink.net)  
<http://www.home.earthlink.net/~chistrask>

Graphics by Loek Frederiks

-----  
Date: Fri, 24 Jan 2003 11:33:30 -0600  
From: "Don Wines" <[dwines@tyler.net](mailto:dwines@tyler.net)>  
To: "Low Power Amateur Radio Discussion" <[qrp-l@Lehigh.EDU](mailto:qrp-l@Lehigh.EDU)>  
Subject: [145148] Re: What is "X"?  
Message-ID: <02b901c2c3ce\$b611e2e0\$e8034c42@coxinternet.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="Windows-1252"  
Content-Transfer-Encoding: 7bit

Hi Wayne,

Welcome back to the fold!

The "X" you're hearing is probably a "TU", short for "Thank You". A lot of ops run the TU together and it sounds like an X.

72

Don, K5DW

[k5dw@arrl.net](mailto:k5dw@arrl.net)

QRP-L #2083 QRP-ARCI #10145 NETXQRP #3 EM22gm

Visit the NETXQRP Web Site at <http://www.netxqrp.org>

----- Original Message -----

From: "KL7FDQ, Wayne Leman" <[KL7FDQ@rangeweb.net](mailto:KL7FDQ@rangeweb.net)>

> I got back on the air a few weeks ago after several years of absence. I've  
> been hearing a number of CW ops now using "X" as some kind of abbreviation,  
> esp. at the end of their transmission. Could any of you tell me what the  
> "X"

> means? CW has been my main mode for many years (I've been a ham for 40  
> years), but I haven't been able to figure out "X".

>

> Tnx,

> 73,

> Wayne  
>

-----  
Date: Fri, 24 Jan 2003 12:35:32 -0500  
From: "Garey Barrell" <k4oah@mindspring.com>  
To: <k3tks@u1.abs.net>,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [145149] Re: How would you clean this roller inductor?  
Message-ID: <000c01c2c3ce\$fedd7200\$6501a8c0@hp>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

If you go the dishwasher route, be SURE that the "heated dry cycle" is disabled.

The ceramic pieces absorb some water during the wash, and when heated by the dry cycle literally explode the ceramic.

ANY silver cleaner, liquid or paste, removes "some" silver. Best to leave it alone. The black is soft and very nearly as conductive as silver.

73, Garey - K40AH  
Atlanta

----- Original Message -----  
From: "George Gingell" <k3tks@u1.abs.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Sent: Friday, January 24, 2003 11:30 AM  
Subject: Re: How would you clean this roller inductor?

>  
> If plastic not involved, you can even run it thru the dishwasher.  
>  
> Then blow dry with hair dryer or other forced air device.  
>  
> I would use Tarn-x or other similar liquid Silver Oxidation Remover on the  
>  
> coils. Paste types not recommended as they actually remove metal from the

>  
> silver plated components.  
>

-----  
Date: Fri, 24 Jan 2003 11:38:23 -0600  
From: "Pat Whelton" <pwhelton@earthlink.net>  
To: <KL7FDQ@rangeweb.net>,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [145150] Re: What is "X"?  
Message-ID: <015201c2c3cf\$65489f60\$8901a8c0@Earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hi Wayne. I'm guessing what you are hearing is BT (Break) being used as a  
thought separator or as filler until the operator composed his thoughts.  
Just a thought.

73's  
Pat - KZ5J

----- Original Message -----  
From: KL7FDQ, Wayne Leman <KL7FDQ@rangeweb.net>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Sent: Friday, January 24, 2003 9:53 AM  
Subject: What is "X"?

> I got back on the air a few weeks ago after several years of absence. I've  
> been hearing a number of CW ops now using "X" as some kind of abbreviation,  
> esp. at the end of their transmission. Could any of you tell me what the  
> "X"  
> means? CW has been my main mode for many years (I've been a ham for 40  
> years), but I haven't been able to figure out "X".  
>  
> Tnx,  
> 73,  
> Wayne  
> -----  
> Wayne Leman  
> <http://www.qsl.net/kl7fdq>  
>  
>

-----  
Date: Fri, 24 Jan 2003 12:40:47 -0500  
From: "AI2Q" <ai2q@adelphia.net>  
To: "QRP-L (E-mail)" <qrp-l@Lehigh.EDU>  
Cc: <nkennedy@tcainternet.com>  
Subject: [145151] What is "X and SO-LID copy  
Message-ID: <000001c2c3cf\$bbe52b40\$6401a8c0@hq.cmp.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hi Nick:

Gosh, I recall when my pal WV2IIW and I (WV2IKT) used to be perplexed as Novices back in 1959 when someone would come back on CW and say "so lid." We couldn't figure out why so many ops were calling us lids! :-(

Vy 73, AI2Q, Alex in Kennebunk, Maine QRP-L #687 .-.-.

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of Nick Kennedy  
Sent: Friday, January 24, 2003 12:16 PM  
To: Low Power Amateur Radio Discussion  
Subject: RE: What is "X"?

Not sure but I'll take a shot.

Could they be saying TU (Thany You) and slurring the letters together?  
I've heard it done.

Reminds me of forty years back, I asked my mentor why so many folks sent NST when tuning up. Turns out they were saying "TEST" and running the T and E together. After I realized that, it seemed perfectly normal that NST meant TEST.

72--Nick, WA5BDU

-----  
Date: Fri, 24 Jan 2003 12:45:53 -0500

From: Ed Tanton <n4xy@earthlink.net>  
To: ccart@phideaux.com,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [145152] Re: OT: SMT work  
Message-ID: <5.2.0.9.2.20030124123104.03880dd0@pop.earthlink.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

Yeah Chris... I have some of those REALLY SMALL SMT parts myself... I think (unlike previous SMT soldering I have done where I tin the pads and place the part down to solder one edge-hopefully not bumping it off) these would HAVE to be glued down first. Try using the tip of an unfolded paperclip, and place a dot of your adhesive-of-choice between pads (ought to be just the right sized dot of adhesive for one of these nearly microscopic parts!), tweeze the part down on the dot, then solder the edges.

There are Weller WTCP 1/16" tips-that are still large in comparison-but should be useable for soldering the pads to the chip-ends. I have tried the 'trick' listed in H&K-or somewhere-about wrapping a copper wire around your tip, and using that, but have never found it to be the least bit satisfactory trying to solder 0.5mm-spaced SSOPs (or whatever that spacing is).

I got one of those-let's call them "inexpensive" rather than "cheap"-Chinese stereo microscopes several years ago, and have been very pleased with it... you might think about getting one if you're going to do much of this sort of REALLY fine work. You do get a feel for moving this HUGE thing in the lens to the work-although I have to place the iron's tip near the solder joint each time from outside the field of view.

73 Ed Tanton N4XY <n4xy@earthlink.net>

Ed Tanton N4XY  
189 Pioneer Trail  
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

All emails <IN> & <OUT> checked by  
Norton AntiVirus with AutoProtect

LM: ARRL QCWA AMSAT & INDEXA;  
SEDXC NCDXA GACW QRP-ARCI  
OK-QRP QRP-L #758 K2 (FT) #00057

-----  
Date: Fri, 24 Jan 2003 12:47:45 -0500  
From: "KB0VCC" <kb0vcc@adelphia.net>  
To: <qrp-1@Lehigh.EDU>  
Subject: [145153] Re: K1/FT-817 FOXII obsevationes...  
Message-ID: <000301c2c3d0\$b4cbbc60\$6501a8c0@dalenotebook>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Thanks for the comparison, Trev. I did a similar comparison during a hunt a month or so ago when N1FN in CO was the FOX. I compared the RX of my FT-990 to my OHR-500 and discovered I could NOT hear Marshall well enough for legible copy on my '990. It was maybe about 10% or so, just enough to know it was him. Yet, although his signal was weak, I could clearly copy him on the '500, where legibility was maybe around 95%. Three cheers for low-tech! The '990 has the 250Hz CW filter and SCAF, yet what good is it if the signals are below the noise floor? I did everything, even kicked out the AGC, pumped up the AF and backed down the RF gain, but still couldn't pull him in on the '990 like I could on the OHR. An enlightening experiment for anyone with multiple rigs and an A/B switch.

72/73,  
Dale

-----  
Date: Fri, 24 Jan 2003 12:46:01 -0500  
From: "Charles Mabbott" <aa8vs@msn.com>  
To: qrp-1@Lehigh.EDU  
Subject: [145154] RE: What is "X"?  
Message-ID: <F17wFbB7T81J1hu3TS100008945@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

They are sending T U [thank you] but at higher speeds it gets put together and the space may not always be there.

73 oo  
Chuck AA8VS

"Whoever said the pen is mightier than the

sword obviously never encountered automatic weapons."

<http://68.43.100.7:81/aa8vs>

>

>On Friday, January 24, 2003 9:54 AM, KL7FDQ, Wayne Leman

>[SMTP:KL7FDQ@rangeweb.net] wrote:

> > I got back on the air a few weeks ago after several years of absence.

>I've

> > been hearing a number of CW ops now using "X" as some kind of  
> abbreviation,

> > esp. at the end of their transmission. Could any of you tell me what the  
> "X"

> > means? CW has been my main mode for many years (I've been a ham for 40  
> > years), but I haven't been able to figure out "X".

---

MSN 8 with e-mail virus protection service: 2 months FREE\*  
<http://join.msn.com/?page=features/virus>

---

Date: Fri, 24 Jan 2003 12:54:23 -0500  
From: "Charles Mabbott" <aa8vs@msn.com>  
To: michael.babineau@sympatico.ca, qrp-1@Lehigh.EDU  
Subject: [145155] Re: RS 5" Mag Mount Clearance (3/8X 24 thread)  
Message-ID: <F51cEPt0n1NFf82rPe400000ef2@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

I have used mag mounts, but more problem with them blowing off the car with single magnets. I have been told the triples work well, but I lease the cars and I visualize the scratches three magnets leaving being harder to explain when you turn the car in.

That is a decent price on the mag mount though. Used to use them when parked at a destination.

Original question: w/o the ground strap I could easily tune 20 meters and higher and get a decent SWR [not necessarily efficient]

Could not get decent SWR on 40 or 80 without the ground strap at all. Like chicken soup it does not hurt on the higher bands either.

I use a trunk lip mount and have not had an antenna blow off the car yet and have a ground strap to.

73 oo

Chuck AA8VS

"Whoever said the pen is mightier than the sword obviously never encountered automatic weapons."

<http://68.43.100.7:81/aa8vs>

>From: Michael Babineau <michael.babineau@sympatico.ca>  
>Reply-To: michael.babineau@sympatico.ca  
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
>Subject: RS 5" Mag Mount Clearance (3/8X 24 thread)  
>Date: Fri, 24 Jan 2003 09:30:22 -0500  
>  
>Folks :  
>  
>I happened to be in Vermont last weekend and popped into a Radio  
>Shack and found a 5" Mag Mount with a standard 3/8 X 24 thread at  
>a clearance price of \$12.47.  
>  
>This is just the thing I was looking for to slap a Hamstick onto the roof  
> of the car when parked for a little QRP car-portable operating.  
>The quality seems pretty good .. it looks just like the magnet and hardware  
>on my much more expensive triple mag mount.  
>  
>I'm not sure if this has been discontinued and thus the clearance, but if  
>you are interested in checking this out at your local RS here are the  
>details :  
>  
>CB Antenna Magnet Mount RS 21-997, regular price \$24.99, clearance price  
>\$12.47.  
>  
>  
>Michael VE3WMB  
>  
>P.S. A question for those of you that use a magnet mount on your car for  
>HF. Do you  
>you use a ground strap of some kind (I always have) and if not what kind of  
>match  
>and performance are you getting



-----  
MSN 8 with e-mail virus protection service: 2 months FREE\*  
<http://join.msn.com/?page=features/virus>

-----  
Date: Fri, 24 Jan 2003 11:58:12 -0600  
From: "George, W5YR" <w5yr@att.net>  
To: <n1tp@swfla.rr.com>,  
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [145156] Re: Two More Sweeps!  
Message-ID: <005201c2c3d2\$2a41d0a0\$0201a8c0@fairviewtx.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="Windows-1252"  
Content-Transfer-Encoding: 7bit

But, Tom, we PT's were at severe disadvantage last evening.

I am located only 639 miles from Larry in CO and 827 miles from Tom in AZ. Very close-in for 40 at that time of night. Yet FL was at an optimum distance for either. . . hmmm.

But, I did keep it down to only three antennas!

73/72, George  
Amateur Radio W5YR - the Yellow Rose of Texas  
In the 57th year and it just keeps getting better!  
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
K2 #489 IC-765 #2349 IC-756 PRO #2121 IC-756 PRO2 #3235

Message -----  
From: "Tom Palmer" <n1tp@swfla.rr.com>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Sent: Friday, January 24, 2003 5:26 AM  
Subject: Re: Two More Sweeps!

> I move for adoption of the following new Rule for the QRP-L  
> Foxhunts:  
>  
> Each "Pesky Texan" who ends the hunting season in the top  
> tier of number of pelts bagged shall automatically have one  
> (1) pelt deducted from his pelt total (to level the playing  
> field by partially eliminating the wholly unfair geographic

> advantage enjoyed by each "Pesky Texan" and suffered by all  
> other Hounds). (Hi!)  
>  
> Tom, N1TP  
> Naples, Florida  
>

-----  
Date: Fri, 24 Jan 2003 13:02:10 -0500  
From: Ed Tanton <n4xy@earthlink.net>  
To: kkanalz@gcecis.com,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [145157] RE: DC Voltage Standard  
Message-ID: <5.2.0.9.2.20030124130027.01ddf210@pop.earthlink.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

And I recall reading somewhere that Mercury batteries (if you can still get them?) were pretty good references-but do not remember what that voltage was.

At 06:06 AM 2003-01-24, Karl Kanalz wrote:

>A FRESH zinc-carbon cell will deliver 1.556 volts DC with no load (or at  
>least, a high-impedance load such as a VTVM or FET voltmeter). Heathkit  
>used to use this as a "standard" to calibrate their VTVMs built by their  
>customers - I think there was even a "calibration mark" on the meter  
>face.....  
>  
>Karl K - W8TIF  
>McKinney, Texas  
>  
>///snip

73 Ed Tanton N4XY <n4xy@earthlink.net>

Ed Tanton N4XY  
189 Pioneer Trail  
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

All emails <IN> & <OUT> checked by  
Norton AntiVirus with AutoProtect

LM: ARRL QCWA AMSAT & INDEXA;  
SEDXC NCDXA GACW QRP-ARCI  
OK-QRP QRP-L #758 K2 (FT) #00057

-----  
Date: Fri, 24 Jan 2003 12:06:38 -0600  
From: "George, W5YR" <w5yr@att.net>  
To: <KL7FDQ@rangeweb.net>,  
      "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [145158] Re: What is "X"?  
Message-ID: <008a01c2c3d3\$58123820\$0201a8c0@fairviewtx.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
      charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

It is "TU" being sent somewhat poorly. "Thank you"

73/72, George  
Amateur Radio W5YR - the Yellow Rose of Texas  
In the 57th year and it just keeps getting better!  
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe  
K2 #489 IC-765 #2349 IC-756 PRO #2121 IC-756 PRO2 #3235

----- Original Message -----  
From: "KL7FDQ, Wayne Leman" <KL7FDQ@rangeweb.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Sent: Friday, January 24, 2003 9:53 AM  
Subject: What is "X"?

> I got back on the air a few weeks ago after several years of  
absence. I've  
> been hearing a number of CW ops now using "X" as some kind of  
abbreviation,  
> esp. at the end of their transmission. Could any of you tell me what  
the "X"  
> means? CW has been my main mode for many years (I've been a ham for  
40  
> years), but I haven't been able to figure out "X".

-----  
Date: Fri, 24 Jan 2003 13:59:21 -0500  
From: Paul Valko <w8kc@comcast.net>  
To: KL7FDQ@rangeweb.net, qrp-1@Lehigh.EDU

Subject: [145159] Re: What is "X"?  
Message-ID: <1b09581b23f6.1b23f61b0958@icomcast.net>  
MIME-version: 1.0  
Content-type: text/plain; charset=us-ascii  
Content-language: en  
Content-transfer-encoding: 7BIT  
Content-disposition: inline

Listen closely... I have a sneaky suspicion that you are missing the extra "dit" in DAHdididiDAH. You know, the BT character used for pauses and such between thoughts in a conversation.

But that's just my opinion, I could be wrong.

73 =paul= W8KC

----- Original Message -----

From: "KL7FDQ, Wayne Leman" <KL7FDQ@rangeweb.net>  
Date: Friday, January 24, 2003 10:53 am  
Subject: What is "X"?

> I got back on the air a few weeks ago after several years of  
> absence. I've  
> been hearing a number of CW ops now using "X" as some kind of  
> abbreviation, esp. at the end of their transmission. Could any of  
> you tell me what the "X"  
> means? CW has been my main mode for many years (I've been a ham  
> for 40  
> years), but I haven't been able to figure out "X".  
>  
> Tnx,  
> 73,  
> Wayne  
> -----  
> Wayne Leman  
> <http://www.qsl.net/kl7fdq>  
>  
>  
>

-----  
Date: Fri, 24 Jan 2003 11:04:03 -0800  
From: <mm1esg@compuserve.de>

To: qrp-1@Lehigh.edu  
Subject: [145160] Off Topic: FYBO and hate it? Rental near Joshua Tree Park, CA  
Message-ID: <aa4aa2dc.a2dcaa4a@compuserve.de>  
MIME-Version: 1.0  
Content-Language: de  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline  
Content-Transfer-Encoding: 7bit

Location: <http://www.29palms.com> in the High Desert. Near City centre but quiet. Today only 65 F so far, but enough to get a tan hi.

About 2300 ft high, antennas welcome! Water, Trash, Cable TV, Electric paid and fridge & cooker provided. Gas heating. Starting at \$ 345 p.m., 1 month deposit.

Several Marines got their orders and I wlt rent to fellow hams.

Mni tnx for the space,

Chris kf6vci  
760 447 3958

-----  
Date: Fri, 24 Jan 2003 13:04:54 -0600  
From: Chuck Carpenter <w5usj@9plus.net>  
To: qrp-1@lehigh.edu, QRPP-I@yahoogroups.com,  
Rock-Mite\_Group@yahoogroups.com  
Subject: [145161] Rock-Mite PA Heating -- SWR -- Absorptive Bridges  
Message-ID: <3.0.2.32.20030124130454.007cf210@mail.9plus.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

R-Mers,

Several Rock-Mite builders have indicated a condition where the 2N2222A final PA gets hot during extended operation. Sometimes even during short periods of operation.

This doesn't include the cases where the final is changed to a 2N3053, R18 is shorted and L1 goes POOF! Not necessarily the same problem and another story.

With the experiments I've done on various Q6 PA and R18 mods and band changing mods to 80, 30 and 15 meters it became apparent that the little R-Ms were quite sensitive to mismatched loads. Even low SWR caused

considerable PA heating.

To minimize PA heating, heat sinks were used at first. This helped but not enough. A transmatch with an absorptive bridge as a tuning indicator made the biggest difference. The bridge provides a constant 50 Ohm load for the R-M until a match is achieved and is then switched out of or removed from the transmission line circuit.

One version of the bridge, and the one used here, is the same as that used in the Emtech ZM-2. The bridge circuit comes from Dan Tayloe, N7VE. Lew, N5ZE, built this bridge into his Obsidian Rock-Mite (see it on the Rock-Mite Files). You can see more neat bridge ideas at Lew's website too -- <http://www.paceley.com/swr>.

A schematic of the bridge used with a Lofgren-style z-match in my shack is posted on the Yahoo Rock-Mite\_Files in Photos, W5USJ folder.

Chuck Carpenter, W5USJ, Point, Rains Co., TX - EM22cv, NETXQRP #1  
Rock-Mites on 80, 40, 30, 20 and 15 Meters  
QRP-ARCI #5422, QRP-L #1306, QRPP-I #115, ARS #1280, SOC #57  
Zombie #759, COG #11, 6 Club #201, NETXQRP <http://www.netxqrp.org>

-----  
Date: Fri, 24 Jan 2003 11:16:58 -0800  
From: <mm1esg@compuserve.de>  
To: unlisted-recipients:; (no To-header on input)  
Cc: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [145162] Off Topic: FYBO and hate it? Rental near Joshua Tree, \$ 345  
Message-ID: <bb3082c1.82c1bb30@compuserve.de>  
MIME-Version: 1.0  
Content-Language: de  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline  
Content-Transfer-Encoding: 7bit

Antennas welcome, basically everything is included (Cable, Water, electric).

Ask Chris if interested directly or via 760 447 3958.

73,  
kf6vci

-----

Date: Fri, 24 Jan 2003 14:24:11 -0500  
From: "KB0VCC" <kb0vcc@adelphia.net>  
To: <qrp-1@Lehigh.EDU>  
Subject: [145163] Re: What is "X"?  
Message-ID: <000301c2c3de\$2d1bae20\$6501a8c0@dalenotebook>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Can't say I know what the 'X' is, however I've noticed a heavy use of the prosign SN. I get this often when having my CQ responded to. The responding station sends an SN before calling back to me.

Example:

I send: CQ CQ CQ de KB0VCC/QRP KB0VCC/QRP K

He responds: SN KB0VCC de [his callsign (twice)] KN

Given my understanding of the use of SN, I am puzzled by its implementation there. It's always a domestic station that does this. They never use SN again during the QSO, just there when establishing initial contact. Can anyone enlighten me as to it's meaning in this context? Just one of those questions I've always wanted to know but was afraid to ask...

72/73,  
Dale

-----  
Date: Fri, 24 Jan 2003 14:27:46 -0500  
From: "Mike Yetsko" <myetsko@insydesw.com>  
To: <ccart@phideaux.com>,  
                "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [145164] Re: SMT work  
Message-ID: <005501c2c3de\$b31be120\$0300a8c0@charter.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Make sure you have 'delicate' tweezers and a dental pick type tool.

You don't want tweezers that squeeze too hard, or the one time you

'just barely' have a grip on a part it will shift and ZING, it's gone!

Mike

----- Original Message -----

From: "Chris Cartwright" <ccart@phideaux.com>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Sent: Friday, January 24, 2003 7:37 AM

Subject: OT: SMT work

>  
> A current microwave (QRPp 40mW) project requires me to move some 0402  
size  
> caps and resistors around. I've got a small Weller iron (that looks  
> \*HUGE\* next to these things) a magnifier and some pointy tweezers. Just  
> wondering if there's a better way. Short of an SMT rework station I  
> don't have too many ideas. I've done 1208's before without any real  
> trouble, but these thing a literally about the size of the "dot" on the  
> period key of your keyboard.

>  
>  
> -- Chris Cartwright, Unix Administrator |  
ccart@phideaux.com --  
> -- N3XRV ARRL-VE Norcal Zombie #163 | Oxford, PA 19363  
9as --  
> -- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI  
#9271 --  
>  
>

-----  
Date: Fri, 24 Jan 2003 14:34:10 -0500  
From: "Mike Yetsko" <myetsko@insydesw.com>  
To: <j.p.osburn@ieee.org>,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [145165] Re: PCB Printer  
Message-ID: <006d01c2c3df\$93cb6920\$0300a8c0@charter.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

> The consensus is that the idea of using the CDR printer to  
> make PCB's wouldn't work for a number of reasons.  
> The two major ones are



> - Inkjet ink is water based and would be washed away by the etchant.  
> - There's no coating on the PCB to hold the ink and it would go everywhere.  
>  
> Jim, WD9EYB

First I have to ask 'what consensus?'

Why do you assume all ink water based? A number of the 'black' injet refills are waterproof once they dry. I haven't seen color waterproof yet, but the black waterproof is not hard to find.

If the PCB was clean, the ink should 'bead' on it and NOT go 'everywhere'. It works to make transparencies. Why do you assume that it wouldn't work on PCB material?

Even waterbased ink might work. I had troubles with photos being very prone to destruction. Even from a sneeze. Slipping them into a clear celophane holder was the kiss of death! They would bond and stick and finally tear.

I took to taking the photos and 'baking' them by carefully blowing a hair dryer until the paper was HOT to the touch. They seem to be MUCH more durable. Makes me wonder if even the water based inks would hold up to a gentle agitation bath for etching.

Mike

-----  
Date: Fri, 24 Jan 2003 14:37:06 -0500  
From: "Mike Yetsko" <myetsko@insydesw.com>  
To: <aa8vs@msn.com>,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [145166] Re: RS 5" Mag Mount Clearance (3/8X 24 thread)  
Message-ID: <00a501c2c3df\$fbec0a80\$0300a8c0@charter.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

> I have used mag mounts, but more problem with them blowing off the car with  
> single magnets. I have been told the triples work well, but I lease the  
> cars and I visulize the scratches three magnets leaving being harder to  
> explain when you turn the car in.

Have you SEEN this magnet? I use it with a 9' whip on my K2!

Mike

-----  
Date: Fri, 24 Jan 2003 14:34:49 -0500  
From: "Tony Parks" <robert.parks11@gte.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [145167] QRP battery holder glue problem  
Message-ID: <003201c2c3df\$aa828900\$b712f143@3dse0>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I am trying to build a batter holder for eight AA cells using short pieces of PVC tubing having the appropriate ID. The PVC pieces are placed side-by-side in a flat arrangement with glue joints running axially along the length of the PVC pieces where they contact each other. Prior to gluing, the pieces were mechanically cleaned with sandpaper and wiped with a tissue to remove dust. The first unsuccessful attempt was with super glue and resulted in very weak joints.

Any recommendation on how this could be done?

Thanks,  
Tony  
KB9YIG

-----  
Date: Fri, 24 Jan 2003 12:43:49 -0700  
From: "KL7FDQ, Wayne Leman" <KL7FDQ@rangeweb.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [145168] What is "X"?  
Message-ID: <005a01c2c3e0\$f43af3b0\$023d1dac@waynecomputer>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I can hear the difference between BT (which I regularly use) and "x". I think those are probably right who have responded that the "x" that I hear at the

end of a QSO is a sloppily sent "TU" for "thank you".

73,  
Wayne

-----

Wayne Leman  
<http://www.qsl.net/k17fdq>

> Hi Wayne. I'm guessing what you are hearing is BT (Break) being used as a  
> thought separator or as filler until the operator composed his thoughts.  
> Just a thought.  
>  
> 73's  
> Pat - KZ5J

-----

Date: Fri, 24 Jan 2003 14:44:49 -0500  
From: "John" <jdorson@worldshare.net>  
To: "QRP-L" <qrp-l@Lehigh.EDU>  
Subject: [145169] FS 15 mtr. cub  
Message-ID: <025701c2c3e1\$12c03700\$b09a8b41@ATHOME>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Now that I have my MX-21S I am selling the CUB 15 meter rig. Puts out 1  
watt. Includes both MFJ manuals however does not have power cord.

Asking \$80.00 which includes shipping to USA address.

Thanks.  
John K2JHU...  
South Island Real Estate  
jdorson@worldshare.net

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Date: Fri, 24 Jan 2003 15:09:54 -0500 (EST)  
From: Chris Cartwright <ccart@phideaux.com>  
To: QRPL List <qrp-l@lehigh.edu>  
Subject: [145170] Re: SMT work  
Message-ID: <Pine.LNX.4.33.0301241505470.25478-1000000@dns.phideaux.com.>

MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 24 Jan 2003, Mike Yetsko wrote:

> You don't want tweezers that squeeze too hard, or the one time you  
> 'just barely' have a grip on a part it will shift and ZING, it's gone!

Hmmm... sounds like the voice of experience :) I've picked up and placed a few with the tweezers I have, so I think that part will go OK, it's the soldering part that might be tricky. With a "normal" iron and light tinning, surface tension would suck these parts onto the iron. Might make an attempt tonight and have something to report to the group. Several good suggestions so far. Thanks all.

-- Chris Cartwright, Unix Administrator | ccart@phideaux.com --  
-- N3XRV ARRL-VE Norcal Zombie #163 | Oxford, PA 19363 FM29as --  
-- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI #9271 --

-----  
Date: Fri, 24 Jan 2003 14:12:07 -0600 (CST)  
From: Bruce Rattray <rattray@gpfn.sk.ca>  
To: "KL7FDQ, Wayne Leman" <KL7FDQ@rangeweb.net>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [145171] Re: What is "X"?  
Message-ID: <Pine.LNX.4.33.0301241408070.31526-100000@neale.gpfn.sk.ca>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hello Wayne and welcome back...

I was just looking at my scratchpad of notes I made during last night's fox hunt on 40 mtrs....and there it is; your call, KL7FDQ which I heard and copied during the hunt...your rst was 559...

...how 'bout that?...hihihi...I wonder if your "X" is actually "TU?"....for thank you....

..72/73 - Bruce (VE5RC+VE5QRP) QRP-C#1 QRP-L#886 ARCI#9683 Zombie#272  
A-1 Operator Club - 10/10# 944 - QRP Borg#1 - Whiner#10 -  
- VE5QRP SOC#11 - VE5RC SOC#12 - oo#148 - K2#2032 - COG#15 -  
"QRP! How sweet it is!" "I am da man wit "DAH" paddle!"

On Fri, 24 Jan 2003, KL7FDQ, Wayne Leman wrote:

> I got back on the air a few weeks ago after several years of absence. I've  
> been hearing a number of CW ops now using "X" as some kind of abbreviation,  
> esp. at the end of their transmission. Could any of you tell me what the "X"  
> means? CW has been my main mode for many years (I've been a ham for 40  
> years), but I haven't been able to figure out "X".  
>  
> Tnx,  
> 73,  
> Wayne  
> -----  
> Wayne Leman  
> <http://www.qsl.net/k17fdq>  
>  
>

-----  
Date: Fri, 24 Jan 2003 15:12:53 -0500  
From: "Lee Mairs" <lairs@direcway.com>  
To: "qrpl" <qrpl@Lehigh.EDU>  
Subject: [145172] Re: SMT work  
Message-ID: <04f701c2c3e4\$faa6cb30\$2202a8c0@J4>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="Windows-1252"  
Content-Transfer-Encoding: 7bit

Chris -

I got this idea from a fellow 2N2-40 builder in Maryland who passed away  
shortly thereafter.

Drill a hole longitudinally thru a heavy lead sinker. Insert a dowel  
sharpened to a point at one end thru the hole in the sinker, sliding the  
sinker until it is about 1/3 up from the pointy end of the dowel. Hit it  
with a little epoxy and let it set over night. Next cut the straight part  
out of a wire clothes hanger. Bend the wire around the dowel about 1/3 up  
from the dull end of the dowel. Wrap it twice leaving "legs separated by  
about 60-80 degrees. Put some silicon "snake snot" on the ends of the wire  
and let that dry. This implement can now be used to hold small SMT parts in  
place w/o any of your appendages! I set the part where I want it, maneuver  
the hold down thing over the part so that the pointy end pushes on the part  
holding it in place. A drop of flux applied with a tooth pick, some silver  
bearing solder and my Weller WTCPT with a 700 degree small tip, and all is  
right with the world.

I'll send a picture of mine to anybody who contacts me OFF list.

73 de Lee

----- Original Message -----

From: "Chris Trask" <chistrask@earthlink.net>

To: "Low Power Amateur Radio Discussion" <grp-1@Lehigh.EDU>

Sent: Friday, January 24, 2003 12:25 PM

Subject: Re: SMT work

> On Friday, January 24, 2003 5:37 AM, Chris Cartwright asked:

>

> >

```
> > A current microwave (QRPP 40mW) project requires me to move some
> > 0402 size caps and resistors around. I've got a small Weller iron
> > (that looks *HUGE* next to these things) a magnifier and some
> > pointy tweezers. Just wondering if there's a better way. Short
> > of an SMT rework station I don't have too many ideas. I've done
> > 1208's before without any real trouble, but these thing a
> > literally about the size of the "dot" on the period key of your
> > keyboard.
```

> >

 $\succ$ 

> I use two soldering irons. Cheaper than buying a dedicated SMT iron  
and

```
> all those fancy tips.
```

 $\succ$ 

```
> Chris
```

 $\succ$  $\gamma$ 

```

>      /      What's all this      \
>      / extinct stuff, anyhow?    /
>      \ _____,-----'
>      |/

```

> oo\

$$> ( ) \backslash$$
 $\geq \frac{1}{2}$  $\gt \quad \backslash$  $\gamma$ 

&gt;

&gt;

&gt;

&gt;

>

>

 $\succ$ 

>

>

# High Performance Mixers and Amplifiers for RF Communications

Chris Trask / N7ZWY  
Principal Engineer  
Sonoran Radio Research  
P.O. Box 25240  
Tempe, Arizona 85285-5240

IEEE Member #40274515

Email: [christrask@earthlink.net](mailto:christrask@earthlink.net)  
<http://www.home.earthlink.net/~christrask>

Graphics by Loek Frederiks

-----  
Date: Fri, 24 Jan 2003 15:18:06 -0500  
From: "Lee Mairs" <lmairs@direcway.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [145173] Re: OT: SMT work  
Message-ID: <051601c2c3e5\$b50d9ad0\$2202a8c0@J4>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Ed -  
I've tried these magic microscopes and magnifying viewers, but the all seem to get my nose about 2 inches down wind from the fumes. How do you beat this?  
73 de Lee  
KM4YY

----- Original Message -----  
From: "Ed Tanton" <n4xy@earthlink.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Sent: Friday, January 24, 2003 12:45 PM  
Subject: Re: OT: SMT work

> Yeah Chris... I have some of those REALLY SMALL SMT parts myself... I think  
> (unlike previous SMT soldering I have done where I tin the pads and place the part down to solder one edge-hopefully not bumping it off) these would HAVE to be glued down first. Try using the tip of an unfolded paperclip, and place a dot of your adhesive-of-choice between pads (ought to be just the right sized dot of adhesive for one of these nearly microscopic parts!), tweeze the part down on the dot, then solder the edges.  
>  
> There are Weller WTCP 1/16" tips-that are still large in comparison-but should be useable for soldering the pads to the chip-ends. I have tried the  
> 'trick' listed in H&K-or somewhere-about wrapping a copper wire around your  
> tip, and using that, but have never found it to be the least bit  
> satisfactory trying to solder 0.5mm-spaced SSOPs (or whatever that spacing is).  
>  
> I got one of those-let's call them "inexpensive" rather than  
> "cheap"-Chinese stereo microscopes several years ago, and have been very

> pleased with it... you might think about getting one if you're going to do  
> much of this sort of REALLY fine work. You do get a feel for moving this  
> HUGE thing in the lens to the work-although I have to place the iron's tip  
> near the solder joint each time from outside the field of view.  
>  
>  
>  
> 73 Ed Tanton N4XY <n4xy@earthlink.net>  
>  
> Ed Tanton N4XY  
> 189 Pioneer Trail  
> Marietta, GA 30068-3466  
>  
> website: <http://www.n4xy.com>  
>  
> All emails <IN> & <OUT> checked by  
> Norton AntiVirus with AutoProtect  
>  
> LM: ARRL QCWA AMSAT & INDEXA;  
> SEDXC NCDXA GACW QRP-ARCI  
> OK-QRP QRP-L #758 K2 (FT) #00057  
>  
>

-----  
Date: Fri, 24 Jan 2003 15:58:58 -0500  
From: palmer\_t <ThomasPalmer@colliergov.net>  
To: "'qrp-l@Lehigh.EDU'" <qrp-l@Lehigh.EDU>  
Subject: [145174] Re: Two More Sweeps!  
Message-ID: <F833DC5C03BCB34EBE579DC8DC130447815F00@CWW1.bcc.colliergov.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"

Past experience proves that Pesky Texans\* overall throughout each hunting season, have distinct geographic advantages notwithstanding that in one hunt or two the advantage may not necessarily apply.

Tom, N1TP  
Naples, Florida

\* Applies also to Hounds in Colorado and Missouri, but for the present purposes we won't acknowledge those instances.



-----  
Date: Fri, 24 Jan 2003 20:55:02 +0000  
From: Jose Vicente <vicente@supernet.com.br>  
To: qrp-1@Lehigh.EDU  
Subject: [145175] RE: How would you clean this tuner?  
Message-ID: <5.1.0.14.2.20030124204508.026d0240@mailhost.supernet.com.br>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

About this line:

Silver Oxide is one of  
the few oxides that is almost as conductive as its base metal.

I learned it is "silver sulfite" (not silver oxide) and it is a good  
conductor for RF, is it right?

73, Jose PY2AUC

At 04:10 PM 1/24/03, you wrote:

>Mark asks:

>

>

> >Thanks for reading.

>

> > I'm in the process of building a tuner. I have all the parts

> - EF

> >Johnson variable caps, and a real nice roller inductor. The roller inductor

> >has been sitting in a box for years, and has quite a buildup of tarnish.

>

>If it is a silver plated coil (and I suspect it is), you very likely will

>do more damage than good, in trying to clean it. Silver Oxide is one of

>the few oxides that is almost as conductive as its base metal.

>

>In other words...dont mess with it and you'll be fine!

>:-)

>John K5MO

-----  
Date: Fri, 24 Jan 2003 15:22:49 -0600  
From: "Max Moon" <maxmoon@umn.edu>  
To: <qrp-1@Lehigh.EDU>  
Subject: [145176] Re: What is "X"?

Message-ID: <005501c2c3ee\$bfb15d60\$9739fea9@computer>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hello--

I understand that X=TU in so-lid circles. But why do so many DX ops call me "DR"??? Am I "dear" to them? Do they think I'm a doctor? I never know how to respond when some faraway op says, FB DR OM MAX. I mean, if I offend them, they might not QSL!

73,

My wife's dear OM,  
Max k0max

-----  
Date: Fri, 24 Jan 2003 16:30:13 -0500  
From: "Howard Kraus" <K2UD@adelphia.net>  
To: <KL7FDQ@rangeweb.net>  
Cc: <qrp-1@Lehigh.EDU>  
Subject: [145177] Re: What is "X"?  
Message-ID: <002d01c2c3ef\$c7f94f40\$35623018@buf.adelphia.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

You will hear traffic stations using X as a seperation between phrases in an NTS formatted radiogram. It is used much like a period or double-dash (dahdidididah). I haven't heard it used for much else except to signify the letter x in normal conversation. Are you listening to traffic nets when you hear this use of X?

72

Howard Kraus, K2UD  
----- Original Message -----  
From: "KL7FDQ, Wayne Leman" <KL7FDQ@rangeweb.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Sent: Friday, January 24, 2003 10:53 AM  
Subject: What is "X"?

> I got back on the air a few weeks ago after several years of absence. I've  
> been hearing a numer of CW ops now using "X" as some kind of abbreviation,  
> esp. at the end of their transmission. Could any of you tell me what the

"X"

> means? CW has been my main mode for many years (I've been a ham for 40  
> years), but I haven't been able to figure out "X".

>

> Tnx,

> 73,

> Wayne

> -----

> Wayne Leman

> <http://www.qsl.net/kl7fdq>

>

>

-----

Date: Fri, 24 Jan 2003 15:01:16 -0700 (MST)

From: "Karl F. Larsen" <k5di@zianet.com>

To: Trevor Jacobs <kg6cyn@earthlink.net>

Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Subject: [145178] Re: K1/FT-817 FOXII obsevation...

Message-ID: <Pine.LNX.4.44.0301241438210.1446-100000@bucket.dog>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 23 Jan 2003, Trevor Jacobs wrote:

> Hi Gang,

>

> Did a bit of A/B comparison tonight during the FOXII Hunt between the K1  
> and the FT-817. First off, I'm NOT trying to start a flame war here,  
> just stating my observations and opinions, so lets not get into a "my  
> rig is better than your rig" diatribe.

>

> First off, I'd like to thank both FOXII for a fun fox hunt evening! Both  
> of you were a true 599 for the first part of the hunt into Burbank  
> tonight! So much for propagation reports ;-)

So if the stations your comparing rigs with are 599...

>

> Now, after I'd pounced on both FOXII I thought it'd be fun to compare  
> the receiver in the K1 to the FT-817, so I hooked them up with an A/B  
> antenna switch to compare signals. The K1 is stock and the FT-817 has  
> the Collins 500 Hz mechanical CW filter. Here are the observations:

>

> 1.The K1 is much more sensitive in both the wide and the narrow IF  
> filter setting than the FT-817

Please explain "much more sensitive".

> 2.The K1 has a MUCH quieter receiver than the FT-817

If the K1 is more sensitive, how can it be MUCH quieter?

> 3.The K1 seems less prone to background noise

>

Less prone to do what? At my house, when I want to suppress background noise on 40 meters, I turn down the RF gain control on my FT-817. This is good on ALL radios.

> Now, the question is why? My guess is that since the FT-817 covers DC to Daylight that some compromises had to be made in the design.

Why do you think this? In fact there is some phase lock noise generated by the phase locked oscillators that tune the receiver, but it's 30 DB below 40 meter band noise!

The K1

> covers 4 bands max and is CW mode only, so optimizing the rig for this mode and 4 bands is probably a more straight forward task than a DC to Daylight multi mode design within the constraints of the FT-817. But, > the K1 does a fantastic job as a 4 band CW rig, and if this is the > primary mode of choice, it's my opinion that it's a better choice hands > down. It's a much better "CW" rig than the FT-817, and that's my bottom > line in the comparison...  
>

The K1 does only 4 bands and only works on CW. The FT-817 works on those 4 bands and all other frequencies from 500 KHz to 450 MHz. For general use the 817 is a whopping bunch more fun for the money. I use my 817 both as a Hound and as a Fox. It works fine in both roles. It's my best 2 meter handi talki for civic event work.

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

-----

Date: Fri, 24 Jan 2003 18:00:16 -0500

From: "E. Roswell" <eroswell@monmouth.com>  
To: qrp-l@Lehigh.EDU  
Subject: [145179] RE: DC Voltage Standard  
Message-ID: <3E31C580.36B0062@monmouth.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Go to Analog Devices site at  
<http://www.analog.com/>  
and search on "voltage references". You'll get a table of devices which will  
give fairly accurate voltage references.  
You can also copy and paste this specific URL:

[http://www.analog.com/Analog\\_Root/sitePage/mainSectionContent/  
0%2C2132%2Clevel4%253D%25252D1%2526ContentID%253D8493%2526level11%253D117%2526level  
2%253D144%2526level3%253D%25252D1%2C00.html](http://www.analog.com/Analog_Root/sitePage/mainSectionContent/0%2C2132%2Clevel4%253D%25252D1%2526ContentID%253D8493%2526level11%253D117%2526level2%253D144%2526level3%253D%25252D1%2C00.html)

73, Ed, K2MGM.

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End of QRP-L Digest 2810

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